



U.S. Department  
of Transportation

**National Highway  
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400 Seventh Street, S.W.  
Washington, D.C. 20590

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**DYNAMIC SCIENCE, INC.**  
In-Depth Accident Investigation

Contract DTNH22-87C-47169  
Case DSI-93-AB-006

[REDACTED] 1993

## TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.  
CONTRACT NUMBER: DTNH22-87C-47169  
CASE NUMBER: Case DST-93-AB-006

[REDACTED]  
This two vehicle collision occurred on a three-lane, undivided, asphalt paved, urban roadway at a right angle intersection with a seven-lane, divided, urban roadway during the evening hours of a spring weekday in [REDACTED] Maryland [REDACTED] hrs. on [REDACTED] 93).

Vehicle 1, a 1993 Plymouth Acclaim, was being driven west in westbound travel lane one by the unrestrained, 45 year old male driver at a speed estimated to be between 56 and 64 KPH (35 and 40 MPH). Sitting in the right front seating position was an unrestrained, 30 year old female. Sitting in the left rear seating position was a 12 year old male who was wearing the available three-point manual lap/shoulder safety restraints. In the right rear seating position was a 14 year old female who was restrained by the available three-point manual lap/shoulder safety restraints.

Vehicle 2, a 1992 Ford Taurus station wagon, was being driven east in eastbound travel lane 2, in the process of turning left, by the restrained 39 year old male driver at a speed estimated to be between 32 and 40 KPH (20 and 25 MPH).

In the process of making the left turn, Vehicle 2 drove into the travel path of Vehicle 1 and the right front of Vehicle 2 impacted the front plane of Vehicle 1 in a head-on configuration. The forces involved in this impact apparently exceeded the manufacturer's threshold in the supplemental restraint system in both Vehicle 1 and Vehicle 2, and the driver's side airbag in each vehicle deployed.

The Delta V for Vehicle 1 was computed, using CRASH III PC, as 37.5 KPH (23.3 MPH) using a CDC of 12FYEW3 and a PDOF of 357 degrees. The combined direct and induced damage width was 152 cm (60 in) and the maximum crush depth was 77 cm (30.3 in) at C<sub>2</sub>.

The Delta V for Vehicle 2 was computed, using CRASH III PC, as 35.2 KPH (21.9 MPH) using a CDC of 01FZEW2 and a PDOF of 015 degrees. The combined direct and induced damage width was 157 cm (62 in) and the maximum crush depth was 55 cm (21.6 in) at C<sub>4</sub>.

After impact, Vehicle 2 rotated counterclockwise and came to rest in the western quadrant of the intersection. It appears that Vehicle 1 did not rotate after impact and came to rest in the northern quadrant of the intersection.

The driver of Vehicle 1 sustained minor injuries consisting of a fracture, abrasions and contusions: maximum AIS = AIS-2. He was transported to a local hospital where he was treated and released. The right front occupant sustained moderate injuries consisting of a closed head injury, fractures and lacerations: maximum AIS = AIS-3. She was transported to a local trauma center

where she was admitted for treatment. The left rear occupant sustained contusions and abrasions; maximum AIS = AIS-1, and he was transported to a local hospital where he was treated and released. The right rear occupant sustained moderate injuries consisting of a pneumothorax, fracture, rupture, lacerations and contusions; maximum AIS = AIS-3. She was transported to a local hospital, then transferred to a trauma center where she was admitted for treatment.

The driver of Vehicle 2 sustained minor injuries consisting of fractures; maximum AIS = AIS-2. He was transported to a local hospital where he was treated and released.

Both Vehicle 1 and Vehicle 2 were towed from the scene due to damage sustained in this collision.

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*The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.*

*The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.*

*Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crash-worthiness performance of the involved vehicle(s) or their safety systems.*

DYNAMIC SCIENCE, INC.  
ACCIDENT INVESTIGATION  
CASE NUMBER: DS1-93-AB-006

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**ACCIDENT DATA:**

**Location:** [REDACTED] Maryland  
**Area/Type:** Urban/Business  
**Date/Time:** Spring/Evening  
**Accident Type:** Car/Car - Head-on

**Injury Severity:**

**Vehicle 1:** Driver, AIS-2  
R/F Occupant, AIS-3  
L/R Occupant, AIS-1  
R/R Occupant, AIS-3  
**Vehicle 2:** Driver, AIS-2

**AMBIENCE:**

**Viewing Conditions:** Night, road lighted by mercury vapor  
street lights - no restrictions  
**Cloud Cover:** Clear  
**Precipitation:** None  
**Temperature:** 16 to 18  $^{\circ}$  C (60 to 65  $^{\circ}$  F)  
**Road Surface:** Dry

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ROADWAY:

	VEHICLE 1	VEHICLE 2
Type:	3-lane, undivided at right angle intersection with 7-lane, divided roadway	3-lane, undivided at right angle intersection with 7-lane, divided roadway
Width:	10.9 m (35.7 ft)	10.5 m (34.6 ft)
Traffic Density:	Heavy	Heavy
Median:	None	None
Edge:	15 cm (6 in) raised concrete curbs	Formal grass
Surface:	Asphalt	Asphalt
Reported Defects:	None	None
Co-efficient of Friction (est.):	.70	.70
Vertical Alignment:	Level	Level
Horizontal Alignment:	Straight	Straight

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**Traffic Controls:**

	VEHICLE 1	VEHICLE 2
<b>Signals:</b>	On color red, yellow and green traffic signals	On color red, yellow and green traffic signals
<b>Signs:</b>	Several directional and informational signs	Several directional and informational signs
<b>Speed Limit:</b>	56 KPH (35 MPH)	56 KPH (35 MPH)
<b>Markings:</b>	Single, solid, white painted line at north edge (curb) of westbound travel lane 1. Single, solid, white painted line separates westbound travel lanes 1 and 2. Double, solid yellow painted lines separate westbound and eastbound travel lanes. Single, solid white painted line at south edge (curb) of eastbound travel lane.	Single, solid, white painted line separates eastbound travel lanes 1 and 2. Double, solid, yellow painted lines separate eastbound and westbound travel lanes. Single, solid white painted line at the north edge of westbound travel lane.

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**VEHICLES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Description:</b>	1993 Plymouth Acclaim, 4-door	1992 Ford Taurus station wagon
<b>Odometer:</b>	39,154 km (24,330 mi)	49,594 km (30,817 mi)
<b>Engine:</b>	I4 / 2.5 L	V6 / 3.0L
<b>Vehicle Modifications:</b>	None	None
<b>Tire Condition:</b>	Good, approximately 60 percent of tread remains. No abnormal tread wear patterns.	Good, approximately 50 percent of tread remains. No abnormal tread wear patterns.
<b>Manual Restraints:</b>	3-point, manual lap/shoulder restraints at L/F, R/F, L/R and R/R seating positions. 2-point manual lap restraints at C/R, seating position.	3-point, manual lap/shoulder restraints at L/F, R/F, L/R and R/R seating positions. 2-point manual lap restraints at C/F and C/R, seating positions.
<b>Automatic Restraints:</b>	Driver's side airbag	Driver's side airbag
<b>Reported Defects:</b>	None	None
<b>Cargo:</b>	None	68 kgs (150 lbs) assorted boxes of books and art supplies
<b>Windshield Damage:</b>	Cracked by occupant contact and impact forces	Cracked by impact forces
<b>Fleet:</b>	None	None
<b>Tow Status:</b>	Towed due to damage	Towed due to damage

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**VEHICLE DAMAGE:**

	VEHICLE 1	VEHICLE 2
<b>Object Struck:</b>	Vehicle 2	Vehicle 1
<b>Event Number:</b>	1	1
<b>CDC:</b>	12FYEW3	01FZEW2
<b>Maximum Crush:</b>	77 cm (30.3 in) at C <sub>2</sub>	55 cm (21.6 in) at C <sub>4</sub>

**VEHICLE VELOCITY ESTIMATES:**

	VEHICLE 1	VEHICLE 2
<b>Impact Speed: (estimated)</b>	56-64 KPH (35-40 MPH)	32-40 KPH (20-25 MPH)
<b>Total Delta V:</b>	37.5 KPH (23.3 MPH)	35.2 KPH (21.9 MPH)
<b>Longitudinal Delta V:</b>	-37.5 KPH (-23.3 MPH)	-33.9 KPH (-21.1 MPH)
<b>Lateral Delta V:</b>	1.9 KPH (1.2 MPH)	-9.2 KPH (-5.7 MPH)
<b>Energy Dissipation:</b>	107,215.9 joules (79,079.5 ft-lb)	63,654.5 joules (46,949.8 ft-lb)

Calculations based upon: CRASH III PC only.  
No residual scene evidence

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COLLISION SEQUENCE:

**Pre-Crash:** This two vehicle accident occurred during the evening hours of a spring weekday on a three-lane, urban/business roadway in [REDACTED], Maryland. The weather was clear, the roadway was dry and free of defects. It was dark, the roadway was illuminated by mercury vapor street lights, and there were no viewing restrictions. The traffic density was heavy and there is a posted speed limit of 56 KPH (35 MPH).

The roadway is a northwest/southeast, three-lane, asphalt paved road that intersects at right angles with a seven-lane, divided, asphalt paved, northeast/southwest roadway. The intersection traffic is controlled by on color red, yellow and green traffic signals. The estimated coefficient of friction of the intersection surface is .70.

The configuration of the northwest quadrant of the intersection is a southeast bound through travel lane separated from a dedicated left turn lane by a single, solid, white painted line. The dedicated left turn lane is separated from the single northwest bound through travel lane by double, solid, yellow painted lines. The west edge of the roadway is formal grass with no curbs. The east edge of the roadway is a 15 cm (6 in) raised concrete curb.

The southeast quadrant consists of a single northwest bound through travel lane separated from a dedicated left turn lane by a single, solid, white painted line. The dedicated left turn lane is separated from the southeast bound through travel lane by double, solid, yellow painted lines. The east and west edges of the roadway are 15 cm (6 in) raised concrete curbs.

Vehicle 1, a 1993 Plymouth Acclaim four-door, was being driven northwest in the northwest bound through travel lane, entering the southeast quadrant of the intersection, by the unrestrained, 45 year old male driver at a speed estimated to be between 56 and 64 KPH (35 and 40 MPH). Seated in a normal, upright seated position, in the right front seating position was an unrestrained, 30 year old female. Seated in the left rear seating position was a 12 year old male who was restrained by the available three-point, manual lap/shoulder safety restraints. The right rear seating position was occupied by a 14 year old female who was restrained by the available three-point manual lap/shoulder safety restraints.

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Vehicle 2, a 1992 Ford Taurus station wagon, was being driven southeast in the dedicated southeast bound left turn lane at a speed estimated to be between 32 and 40 KPH (20 and 25 MPH) by the 39 year old male driver who was restrained by the available three-point, manual lap/shoulder safety restraints. The driver of Vehicle 2, who was alone in the vehicle, entered the northwest quadrant of the intersection and began to negotiate a left turn into the northeast quadrant of the intersection.

**Crash:** Vehicle 2 was driven into the travel path of Vehicle 1 and the left front plane of Vehicle 1 impacted the right front plane of Vehicle 2 in a head-on configuration.

The Delta V for Vehicle 1 in this impact was computed, using CRASH III PC, as 37.5 KPH (23.3 MPH) using a CDC of 12FYEW3 and a PDOF of 357 degrees. The combined direct and induced damage width was 152 cm (60 in) and the maximum crush depth was 77 cm (30.3 in) at C<sub>1</sub>. Vehicle 1 was equipped with a driver's side airbag. The forces of this impact apparently exceeded the manufacturer's supplemental restraint system threshold and the airbag deployed.

The Delta V for Vehicle 2 in this impact was computed, using CRASH III PC, as 35.2 KPH (21.9 MPH) using a CDC of 01FZEW2 and a PDOF of 015 degrees. The combined direct and induced damage width was 157 cm (62 in) and the maximum crush depth was 55 cm (21.6 in) at C<sub>4</sub>. This vehicle was also equipped with a driver's side airbag, and the forces involved in this collision apparently exceeded the manufacturer's threshold in the supplemental restraint system and the airbag deployed.

**Post Crash:** At the time of the on-site scene inspection that occurred seven days post accident, and within 24 hours of notification, no residual scene evidence could be located. However, based on the driver's statements and the dynamics of the collision, it appears that, at maximum engagement, Vehicle 2 began a counterclockwise rotation, and Vehicle 1 veered right and traveled north in a straight line coming to final rest facing north in the northbound travel lane, at the intersection's north curb. Vehicle 2 continued the counterclockwise rotation of approximately 180 degrees and came to rest in the southeast through travel lane, facing west at the intersection's west curb.

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**Occupant Kinematics:**

The 45 year old driver of Vehicle 1 was seated in a bucket seat in a normal, upright seated position. The driver is 178 cm (70 in) in height and weighs 82 kg (180 lbs). The driver's seat was adjusted to the mid-position and the seat back was adjusted to a normal, upright configuration. Based on occupant contact points, injuries and seat belt inspection, the driver of Vehicle 1 was not wearing the available three-point manual lap/shoulder safety restraints. At impact, the driver's left foot was braced on the floor/toe pan and his right foot was on the brake pedal. In addition, the driver stated that both hands were on the steering wheel rim at the 10 o'clock and 2 o'clock positions, and that he stiffened his arms to brace for the impact.

As a result of the impact forces, the driver was projected forward and slightly to the left and his right knee contacted the instrument panel resulting in a fractured right patella. The driver's hands were forced from the steering wheel rim and the left hand was projected forward causing an abrasion of the left arm as it contacted the steering wheel rim. His left hand continued forward, striking the upper left instrument panel. The driver's right hand continued forward and upward striking the upper center left side windshield resulting in no injury, but causing a "spider-web" crack in the windshield. As the steering column intruded longitudinally and vertically, the steering wheel rim was contacted by the driver's lower chest resulting in a contusion. The driver's face and upper chest contacted the airbag as it deployed, but he sustained no injury as a result of this contact.

Occupant 2 was seated in a normal, upright seated position in a bucket seat that was adjusted to the mid-point. The case occupant is 160 cm (63 in) in height and weighs 102 kg (225 lbs), and she was not wearing the available three-point manual lap/shoulder safety restraints. This occupant, in anticipation of the impact, braced her right and left feet on the floor/toe pan and stiffened her right arm with the right hand on the instrument panel. At impact this occupant was projected forward and to the left. Her right hand was projected forward and up, striking and cracking the right windshield. At the same time her head impacted the rear view mirror and center windshield resulting in a closed head injury with a loss of consciousness of less than one hour and a left eyebrow laceration. Her right hand was apparently not injured. As she was projected forward, left

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and upward, her braced right foot came off the floor/toe pan and struck the heater/air conditioning mechanism under the right instrument panel and her right lower leg and thigh impacted the right instrument panel resulting in fractures of the right femur (mid-shaft), the right tibia (mid-shaft) and the right fibula (mid-shaft).

Occupant 3, a 12 year old male sitting on a bench seat in the left rear seating position in a normal, upright seated position, was wearing the available three-point manual lap/shoulder safety restraints. Occupant 3 is 157 cm (62 in) in height and weighs 41 kg (90 lbs). At impact this occupant was projected forward and slightly left. He loaded the safety restraints, and in so doing sustained minor contusions of the left shoulder and center chest from the safety restraint webbing.

A 14 year old female, Occupant 4, was sitting on a bench seat in the right rear seating position. It was reported that she was sitting in a normal, upright seated position and was wearing the available three-point manual lap/shoulder safety restraints. This occupant is 163 cm (64 in) in height and weighs 61 kg (135 lbs). It appears that the lap restraint was being worn high on the upper abdomen and at impact the occupant was projected forward and to the left, loading the lap/shoulder restraints, which resulted in a ruptured spleen, left pneumothorax, fractured right clavicle, colon laceration, parapancreatic hematoma, and a mesentery hematoma.

The 39 year old driver of Vehicle 2 was seated on a split bench seat, with separate backs, in a normal, upright seated position. The driver who is 180 cm (73 in) in height and weighs 73 kg (160 lbs) was wearing the available three-point manual lap/shoulder safety restraints. His seat was adjusted to near the rear most position and the rear bench seat had the back folded down to accommodate approximately 69 kg (150 lb) of cargo - books and art supplies. At impact, the driver of Vehicle 2 was projected forward and his face and upper chest contacted the driver's side airbag as it deployed. There was no injury from this contact. In addition, as the driver was projected forward, he loaded the three-point manual lap/shoulder safety restraints, and as the cargo shifted forward it struck and loaded the front seat back rests, increasing the loading force of the driver's shoulder and lap restraints, resulting in the driver sustaining a fractured left clavicle and a contusion to the lower abdomen. The left front seat back sustained no

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structural damage as a result of the cargo loading, but the right front seat back rest anchor was sheared and the seat back rest was pushed to the right against the right instrument panel.

**AIRBAG SYSTEM:** Both vehicles involved in this head-on collision were equipped with supplemental restraint systems (driver's side only). At impact, the forces apparently exceeded the manufacturer's threshold speed and the driver's side airbag in each vehicle deployed.

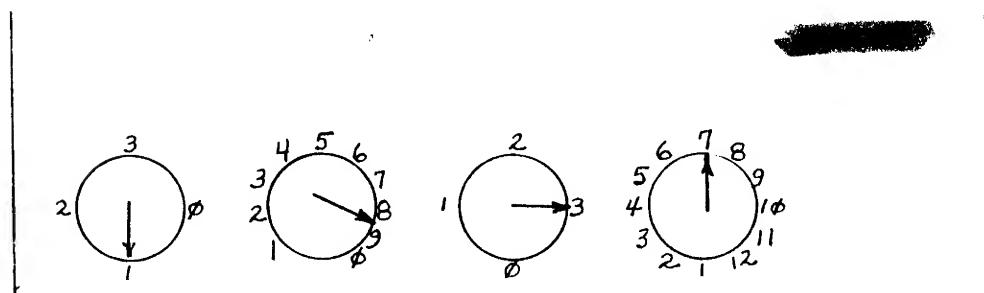
Vehicle 1, 1993 Plymouth Acclaim, was equipped with a driver's side airbag, manufacturer undetermined. There were no stamped identifiers on the 61 cm (24 in) diameter, nylon-like airbag. However, a double bar code tag was found with the following numbers:

Top: [REDACTED]  
Bottom: [REDACTED]

The airbag was not damaged during the accident and did not yield evidence of occupant contact. The airbag was vented by two ports on the back side of the bag (away from the driver). The 3.8 cm (1.5 in) diameter ports were located at the 11:00 and 1:00 o'clock positions approximately 7.6 cm (3 in) below the seam at the top of the airbag, and were separated by a distance of 3.8 cm (1.5 in).

At the time of Dynamic Science's on-site inspection, that occurred seven days post accident, the airbag contained eight horizontal fold creases and three vertical fold creases. The orientation of the fold points were referenced to the top of the steering wheel.

Imprinted on the inside surface of the lower module flap were the following characters:

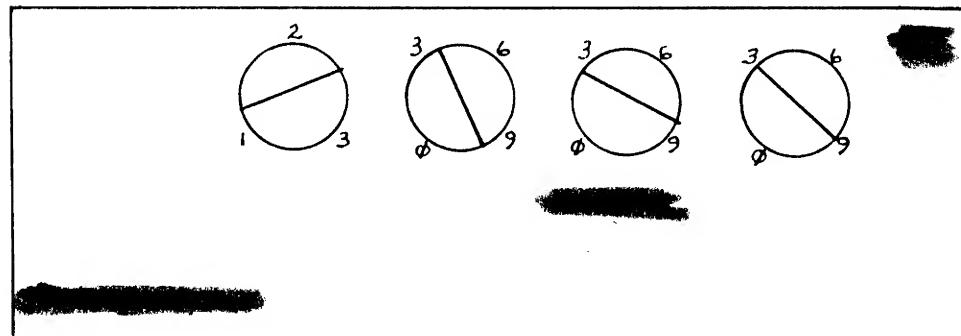


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Vehicle 2, 1992 Ford Taurus Station wagon, was equipped with a driver's side airbag, apparently manufactured by [REDACTED]. There were no stamped numbers or identifiers found on the nylon-like 53.3 cm (21 in) diameter airbag. The airbag was not damaged during the accident sequence, nor did it yield evidence of occupant contact. The airbag was vented by two ports located on the back, top side of the bag (away from the driver). The 2.5 cm (1 in) diameter ports were located 7.6 cm (3 in) below the bag's top seam, were separated by the distance of 16.5 cm (6.5 in) and were centered in the top quadrant of the bag.

At the time of Dynamic Science's on-site inspection, that occurred seven days post accident, the airbag contained seven horizontal fold creases and four vertical fold creases. The orientation of the fold points were referenced to the top of the steering wheel.

The lower flap of the airbag module was entrapped behind the lower steering wheel rim. The interior surface of the top module flap bore the following imprints:



The top of the steering wheel rim was deformed as a result of the driver bracing for the impact with both arms locked and both hands on the steering wheel rim at approximately the 10:00 and 2:00 o'clock positions. At impact, the driver's forward motion caused his arms and hands to deform the steering wheel rim forward. According to the driver, he sustained no injury to his arms or hands.

**SCENE CLEARANCE:** The driver of Vehicle 1 sustained minor injuries consisting of a fracture, abrasions and contusions; maximum AIS = AIS-2. He did not require extrication and was transported to a local hospital where he was treated and released. Occupant

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2 who was seated in the right front seating position, sustained moderate injuries consisting of fractures, a closed head injury and lacerations; maximum AIS = AIS-3. She did not require extrication and was transported to a trauma center where she was admitted for treatment.

Occupant 3 sustained minor injuries consisting of contusions and abrasions; maximum AIS = AIS-1. He did not require extrication and was transported to a local hospital where he was treated and released. Occupant 4, sitting in the right rear seating position sustained moderate injuries consisting of a pneumothorax, fracture, rupture, lacerations and contusions; maximum AIS = AIS-3. She did not require extrication was transported to a local hospital, then transferred to a trauma center where she was admitted for treatment. There were no extrication procedures required to remove any of the four occupants of Vehicle 1.

The driver of Vehicle 2 sustained minor injuries consisting of a fracture and contusion; maximum AIS = AIS-2.

Extrication procedures were not required for the driver and he was transported to a local hospital where he was treated and released.

Both Vehicle 1 and Vehicle 2 were towed from the scene due to damage sustained in this collision.

**SAFETY STANDARDS:** There were no violations of Federal Motor Vehicle Safety Standards and Regulations found regarding either Vehicle 1 or Vehicle 2 during the on-site vehicle inspections. However, Vehicle 2 sustained induced damage to the steering gear box contents and the vehicle had no steering control post-accident. Permission could not be obtained for a detailed inspection of the gear box contents. It was independently confirmed that there was no steering control, and that the front suspension and steering assembly were not damaged to the point of affecting the steering control of Vehicle 2.

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## DRIVER AND OTHER OCCUPANTS:

VEHICLE 1

	DRIVER	OCCUPANT 2
<b>Age/Sex:</b>	45 year old/Male	30 year old/female
<b>Seated Position:</b>	Left Front	Right Front
<b>Seat Type:</b>	Bucket	Bucket
<b>Height:</b>	178 cm (70 in)	160 cm (63 in)
<b>Weight:</b>	82 kg (180 lb)	102 kg. (225 lb)
<b>Occupation:</b>	Truck Driver	Not reported
<b>Pre-existing Medical Condition:</b>	None known	Obesity
<b>Alcohol/Drug Involvement:</b>	None	Tested positive for opiates
<b>Driving Experience:</b>	30 years	N/A
<b>Body Posture:</b>	Normal, upright seated position	Normal, upright seated position
<b>Hand Position:</b>	Both hands on steering wheel rim at the 11 and 1 o'clock positions	L. hand unknown, R. hand on instrument panel
<b>Foot Position:</b>	Left foot on floor/toe pan, right foot on brake pedal	Both feet on floor/toe pan
<b>Restraint Usage:</b>	None	None
<b>Additional Occupants:</b>	3	2

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## DRIVER AND OTHER OCCUPANTS (con't):

VEHICLE 1

	OCCUPANT 3	OCCUPANT 4
<b>Age/Sex:</b>	12 year old/Male	14 year old/female
<b>Seated Position:</b>	Left Rear	Right Rear
<b>Seat Type:</b>	Bench	Bench
<b>Height:</b>	157 cm (62 in)	163 cm (64 in)
<b>Weight:</b>	41 kg (90 lb)	61 kg. (135 lb)
<b>Occupation:</b>	Student	Student
<b>Pre-existing Medical Condition:</b>	None known	None known
<b>Alcohol/Drug Involvement:</b>	None	None
<b>Driving Experience:</b>	N/A	N/A
<b>Body Posture:</b>	Normal, upright seated position	Normal, upright seated position
<b>Hand Position:</b>	Unknown	Unknown
<b>Foot Position:</b>	Both feet on floor	Both feet on floor
<b>Restraint Usage:</b>	3-point, manual lap/shoulder restraint	3-point, manual lap/shoulder restraint
<b>Additional Occupants:</b>	One	None

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## DRIVER AND OTHER OCCUPANTS (con't):

VEHICLE 2

## DRIVER

Age/Sex: 39 year old/Male  
Seated Position: Left front  
Seat Type: Split bench with separate backs  
Height: 180 cm (71 in)  
Weight: 73 kg (160 lb)  
Occupation: Manufacture's Representative  
Pre-existing Medical Condition: None known  
Alcohol Involvement: None  
Driving Experience: 20+ years  
Body Posture: Normal, upright seated position  
Hand Position: Both hands on steering wheel rim at the 10:00 and 2:00 o'clock positions  
Foot Position: Left foot on floor/toe pan, right foot on brake pedal  
Restraint Usage: 3-point, manual lap/shoulder restraint  
Additional Occupants: None

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## INJURIES:

Vehicle 1

	<u>INJURY</u>	<u>OIC CODE</u>	<u>ICD-9</u>	<u>SOURCE</u>
DRIVER:	Fracture, R. Patella	7852400.2,1	822.0	L. Inst. Panel
	Abrasion, L. Arm	7790402.1,2	913.0	Steering wheel rim
	Contusion, Chest	7490402.1,4	922.1	Steering wheel rim
R/F OCCUPANT:	Fracture, R. Femur (mid-shaft)	2851814.3,1	821.01	Inst. Panel
	Closed head injury with a loss of consciousness < one hour	2160202.2,0	850.1	Windshield/mirror
	Fracture, R. Tibia (mid-shaft)	2853420.2,1	823.22	Inst. Panel
	Fracture, R. Fibula (mid-shaft)	2851606.2,1	823.22	Inst. Panel
	Laceration, L. Eyebrow	2290602.1,2	873.42	Windshield/mirror
	Contusion, L. Shoulder	7790402.1,2	923.00	Shoulder restraint
L/R OCCUPANT:	Contusion, Chest	7490402.1,4	922.1	Shoulder restraint
	Rupture, Spleen	2544240.3,2	865.02	Safety restraints
	Pneumothorax, left	2441402.3,2	860.0	Safety restraints
	Fracture, R. Clavicle	2752200.2,1	810.00	Safety restraints
	Laceration, Colon	2540810.2,8	863.42	Safety restraints
	Hematoma, Parapancreatic	2542812.2,7	863.80	Safety restraints
R/R OCCUPANT:	Hematoma, Mesentery	2542010.2,8	863.20	Safety restraints

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DS1-93-AB-006

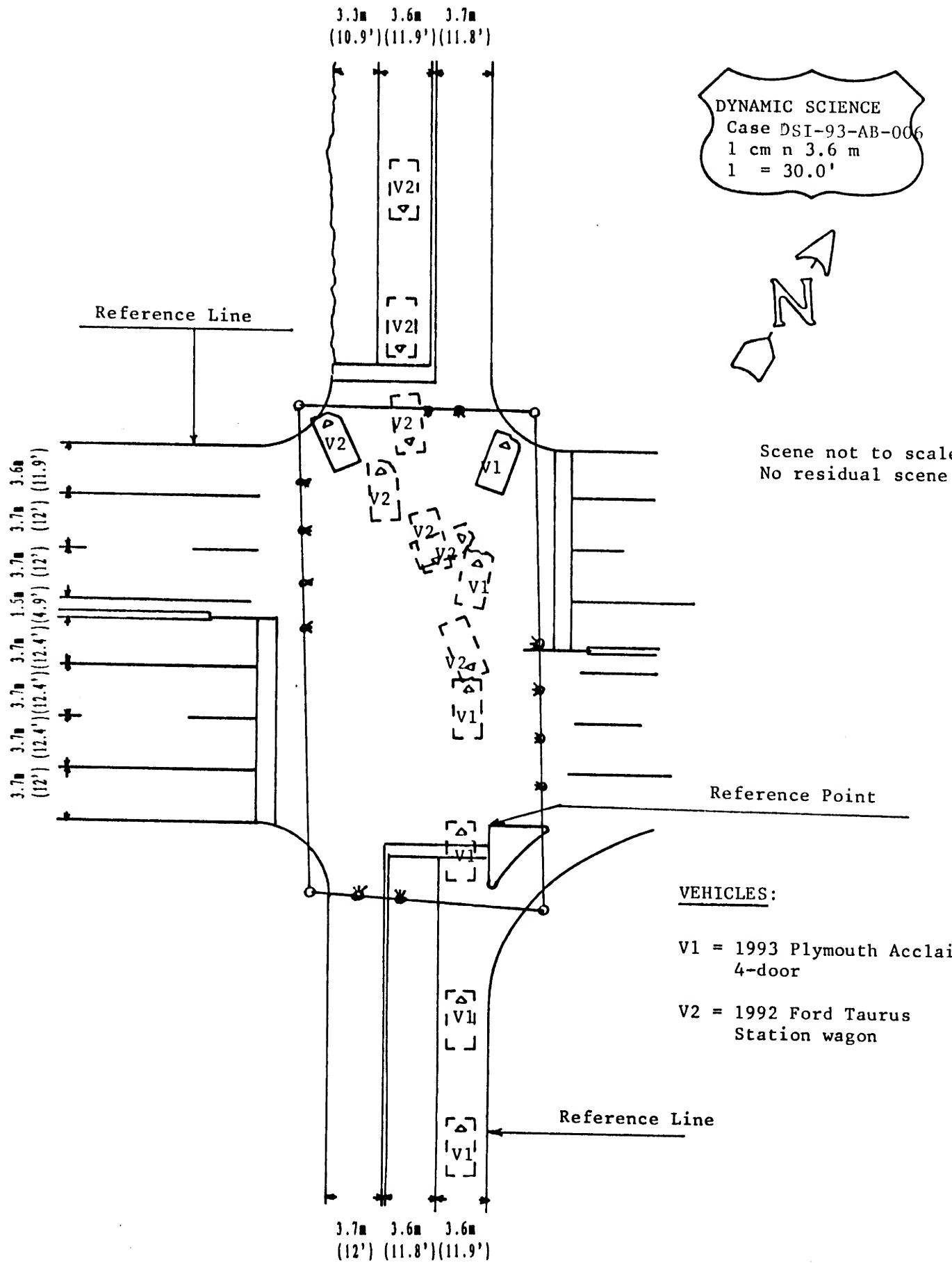
**INJURIES:**

**Vehicle 2**

	<u>INJURY</u>	<u>OIC_CODE</u>	<u>ICD-9</u>	<u>SOURCE</u>
DRIVER:	Fracture, L. Clavicle	7752200.2,2	810.00	Shoulder restraint
	Contusion, Abdomen	7590402.1,4	922.2	Lap restraint

Abbreviations Used In Scene And Photographic Documentation

,	Feet
"	Inches
AIIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound



## COLLISION MEASUREMENTS

Case Number DSI-93-AB-006

Reference Point: West Corner, [REDACTED]

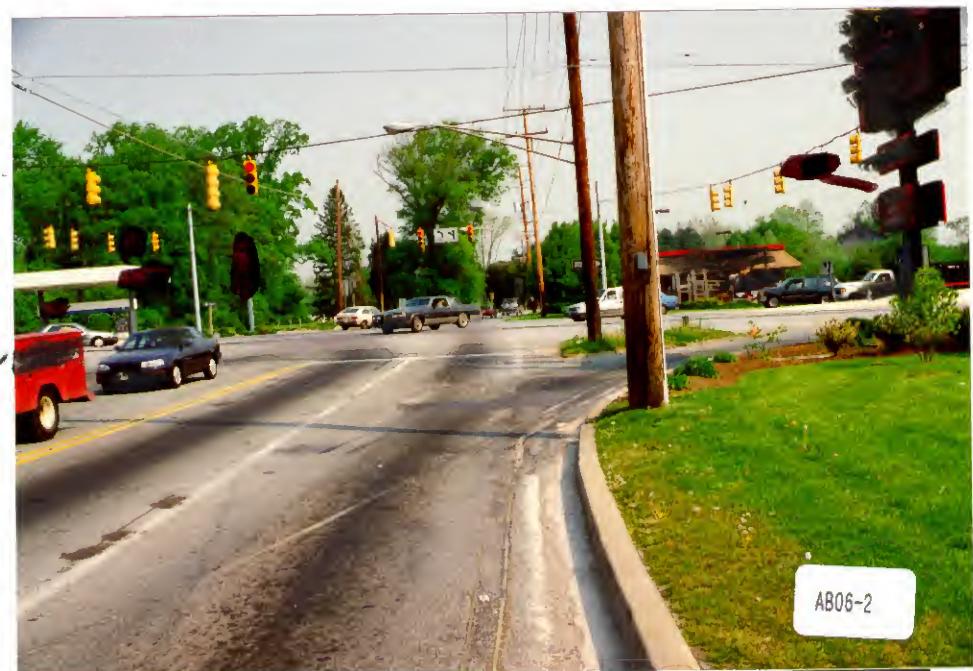
Reference Line: NW/SE Roadway - NE Curb Line, NE/SW Roadway - SW Curb Line

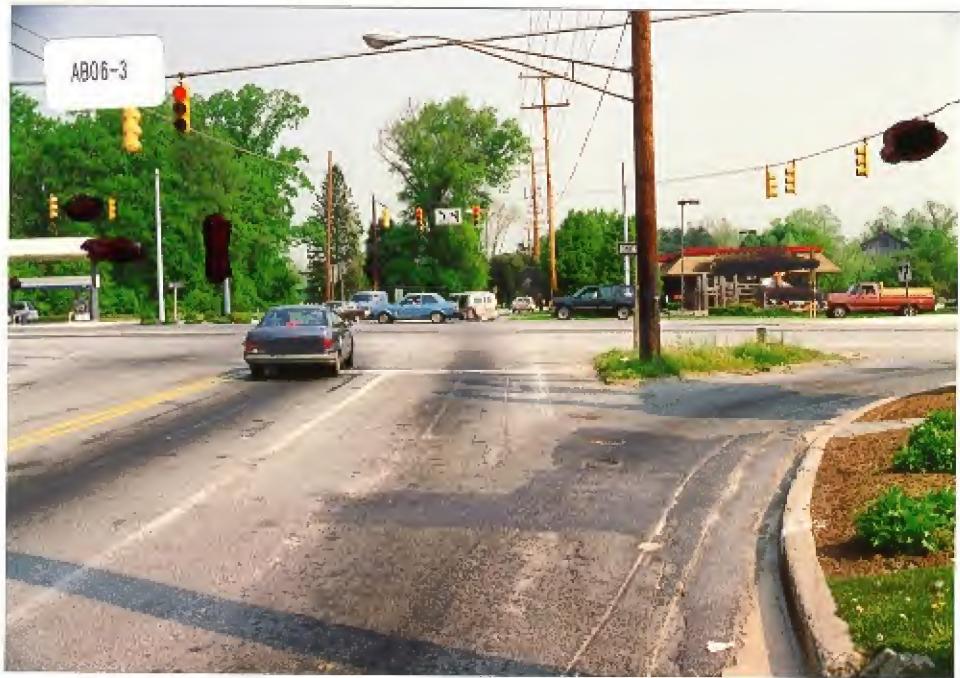
DATA POINT	LONGITUDINALS	LATERALS
NW/SE Roadway		
NE Roadway edge	15.2 m (50 ft) SE	0
Single white line	15.2 m (50 ft) SE	3.6 m (11.9 ft) SW
Double yellow center line	15.2 m (50 ft) SE	7.2 m (23.7 ft) SW
SW roadway edge	15.2 m (50 ft) SE	10.9 m (35.7 ft) SW
NE/SW Roadway		
NW Roadway edge	24.4 m (80 ft) SW	0
Single white line - shoulder	24.4 m (80 ft) SW	3.6 m (11.9 ft) SW
Broken white line	24.4 m (80 ft) SW	7.3 m (23.9 ft) SW
Single white line - SE edge of SW bound travel lane 3	24.4 m (80 ft) SW	10.9 m (35.9 ft) SW
SE edge median	24.4 m (80 ft) SW	12.4 m (40.8') SE
Single white line - left turn lane	24.4 m (80 ft) SW	16.2 m (53.2 ft) SE
Broken white line	24.4 m (80 ft) SW	20 m (65.6 ft) SE
Single white line - SE edge of NE bound travel lane 2	24.4 m (80 ft) SW	23.8 m (78 ft) SE
SE roadway edge	24.4 m (80 ft) SW	27.4 m (90 ft) SE

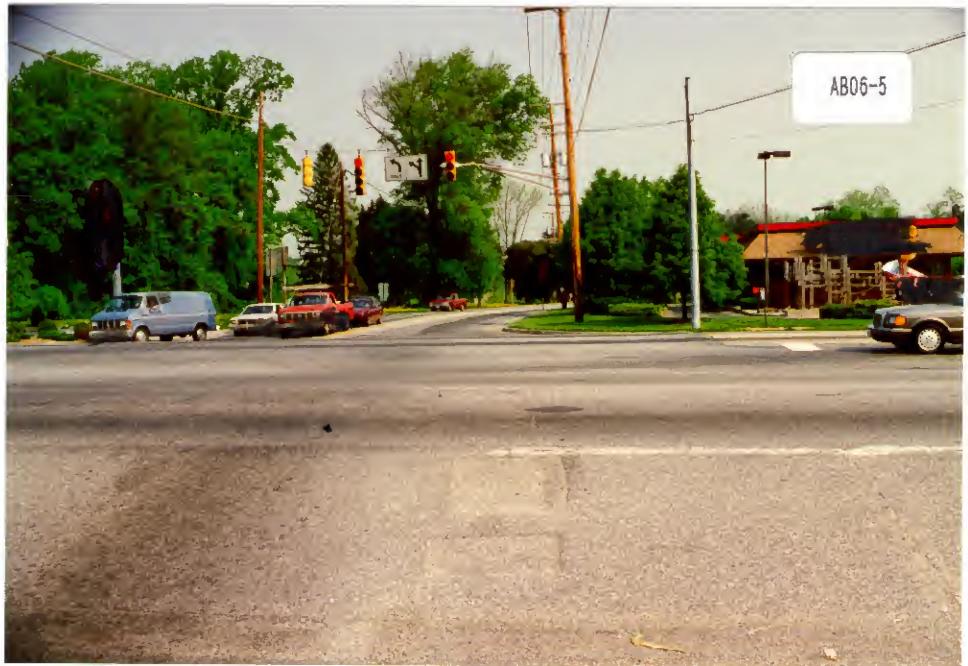
## PHOTO INDEX

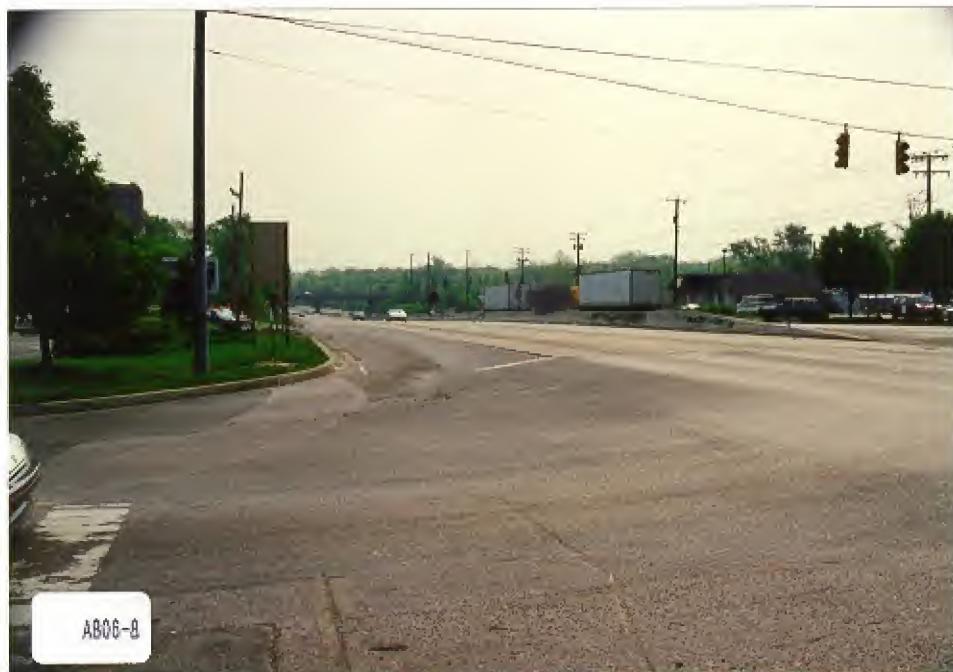
Case No. DSI-93-AB-006

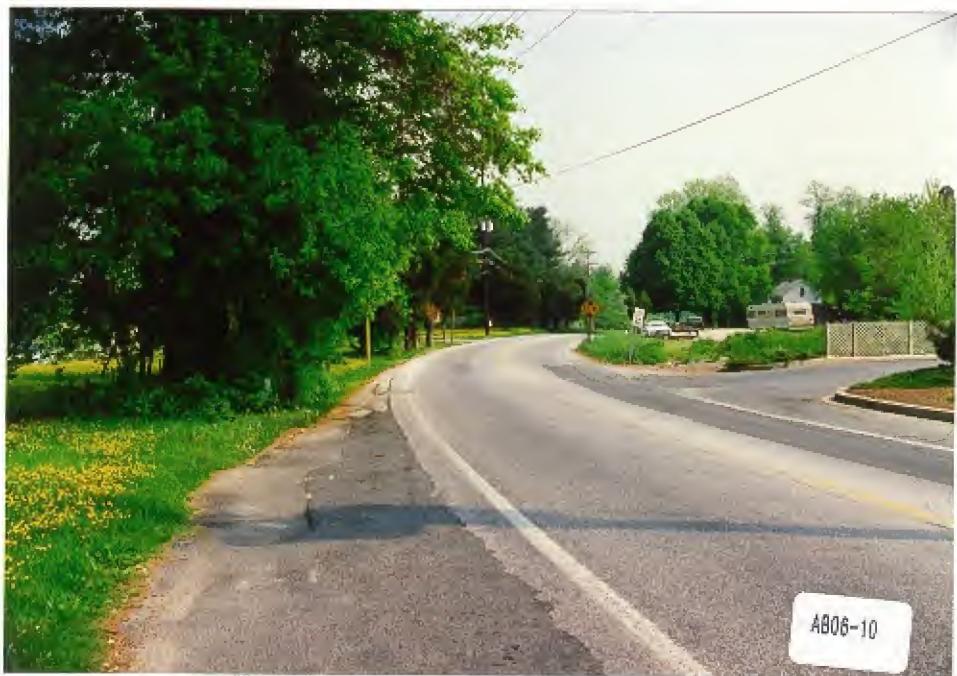
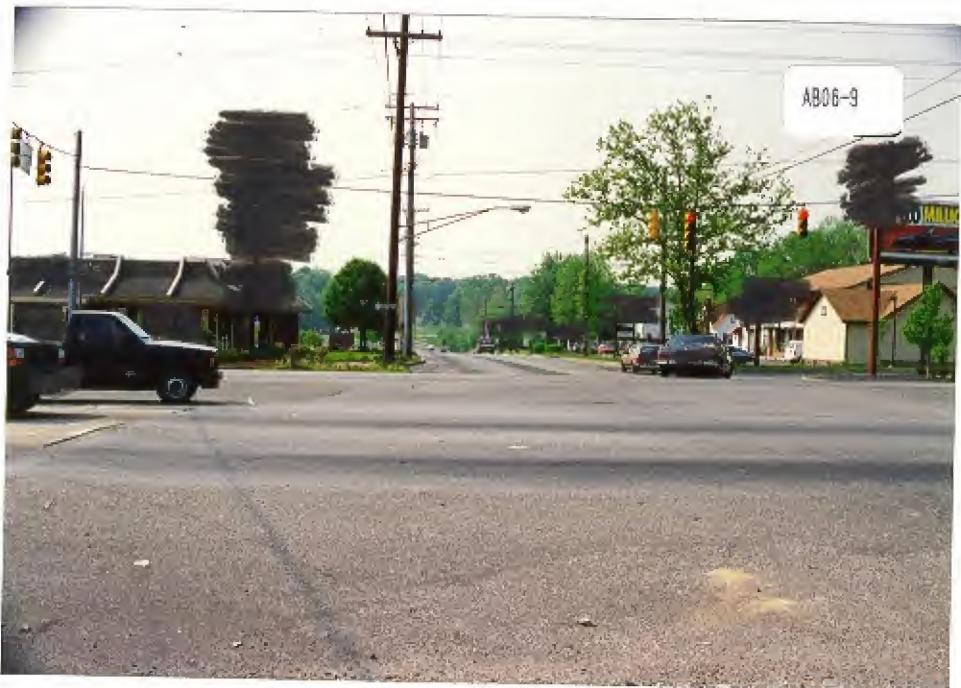
PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1	Vehicle 1	SE	Approach path, Vehicle 1
2-5	Vehicle 1	NW	Approximate Travel path, Vehicle 1
6	Vehicle 1	NW	Approximate POI, Vehicles 1 and 2
7	Vehicle 1	SE	Approximate Reverse travel path, POI to FRP, Vehicle 1
8	Vehicle 2	N	Approximate FRP, Vehicle 1
9	Vehicle 2	SE	Approximate Reverse travel path, Vehicle 1
10	Vehicle 2	NW	Approach path, Vehicle 2
11-14	Vehicle 2	SE	Approximate Travel path, Vehicle 2
15	Vehicle 1	E	Approximate POI, Vehicles 2 and 1
16-17	Vehicle 1	W	Approximate Travel path, POI to FRP, Vehicle 2
18	Vehicle 2	W	Approximate FRP, Vehicle 2
19	Vehicle 2	NW	Approximate Reverse travel path, Vehicle 2
20-32	Vehicle 1	CCW	Exterior views, Vehicle 1
33-54	Vehicle 1	---	Interior views, Vehicle 1
55-69	Vehicle 2	CCW	Exterior views, Vehicle 2
70-91	Vehicle 2	---	Interior views, Vehicle 2

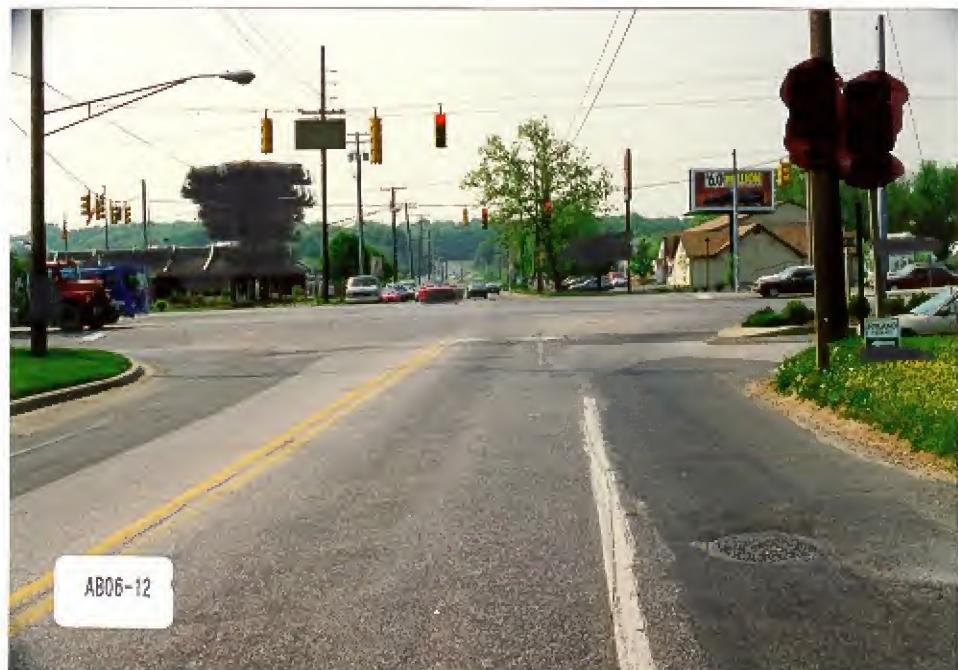


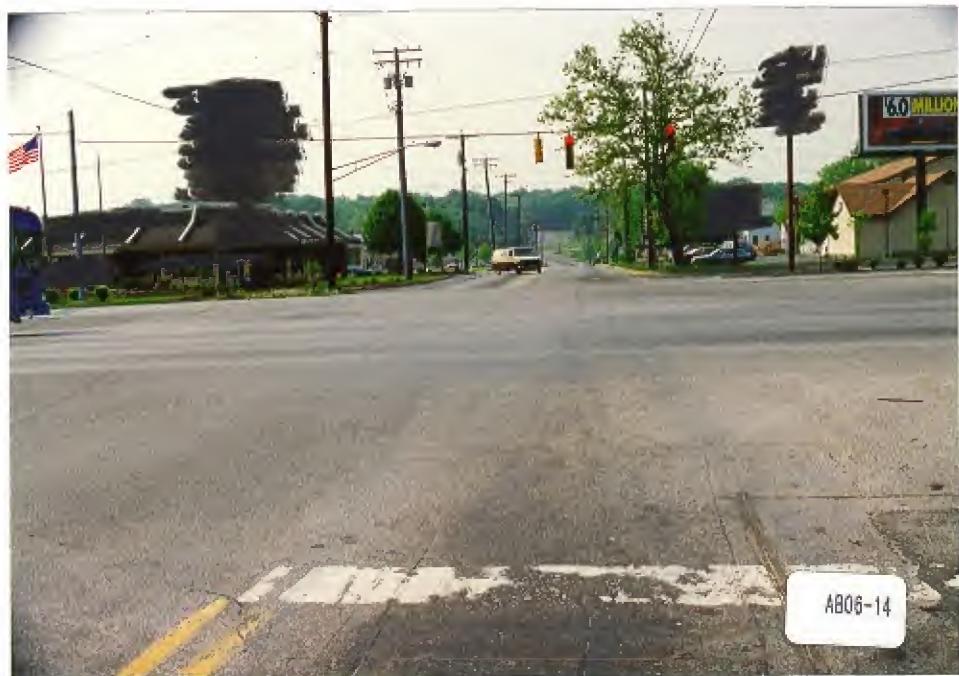
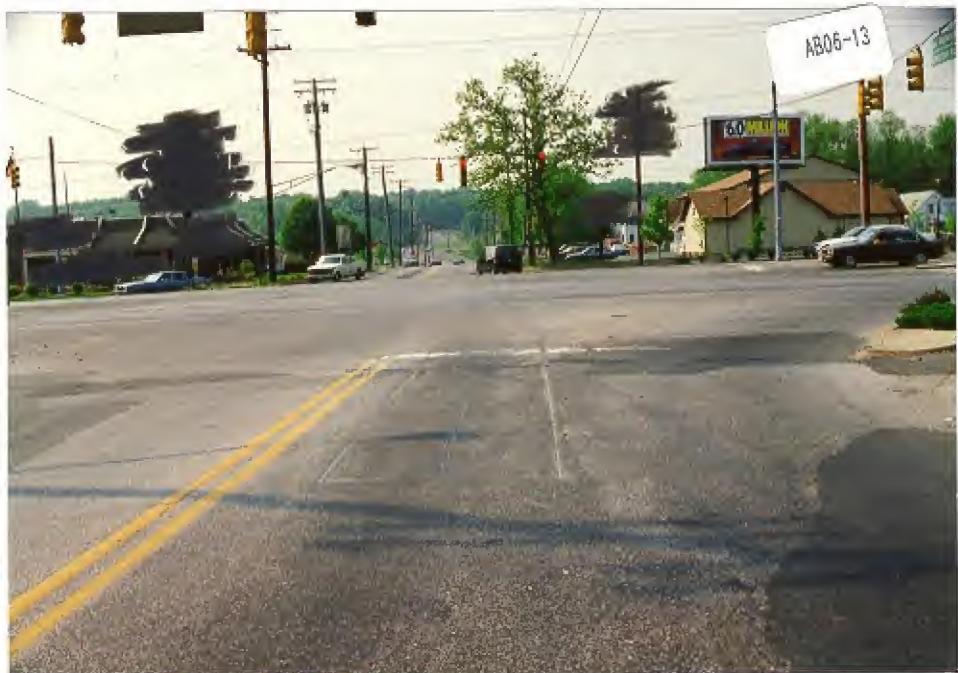




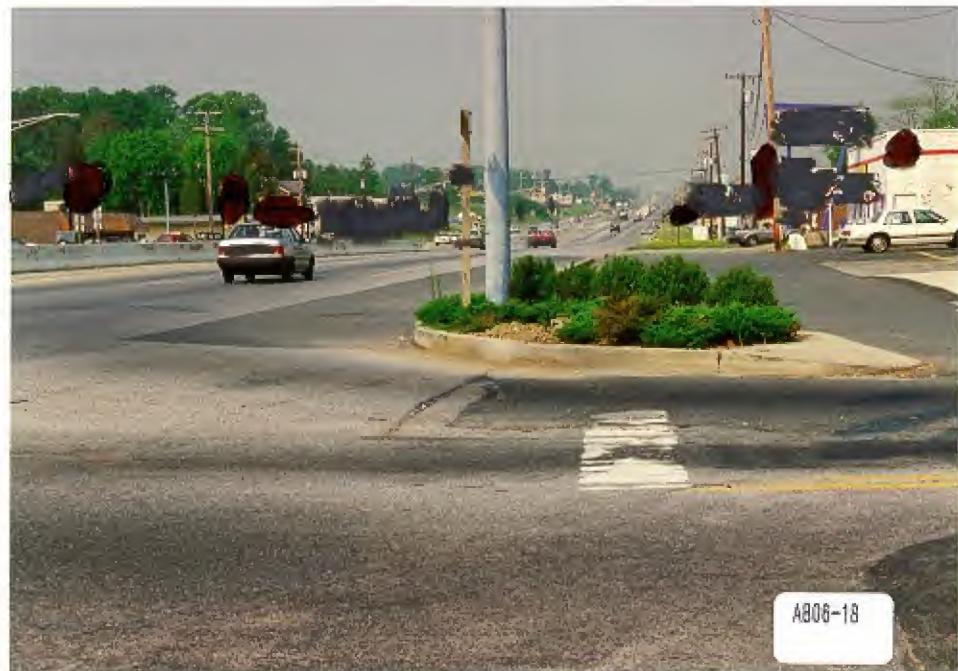
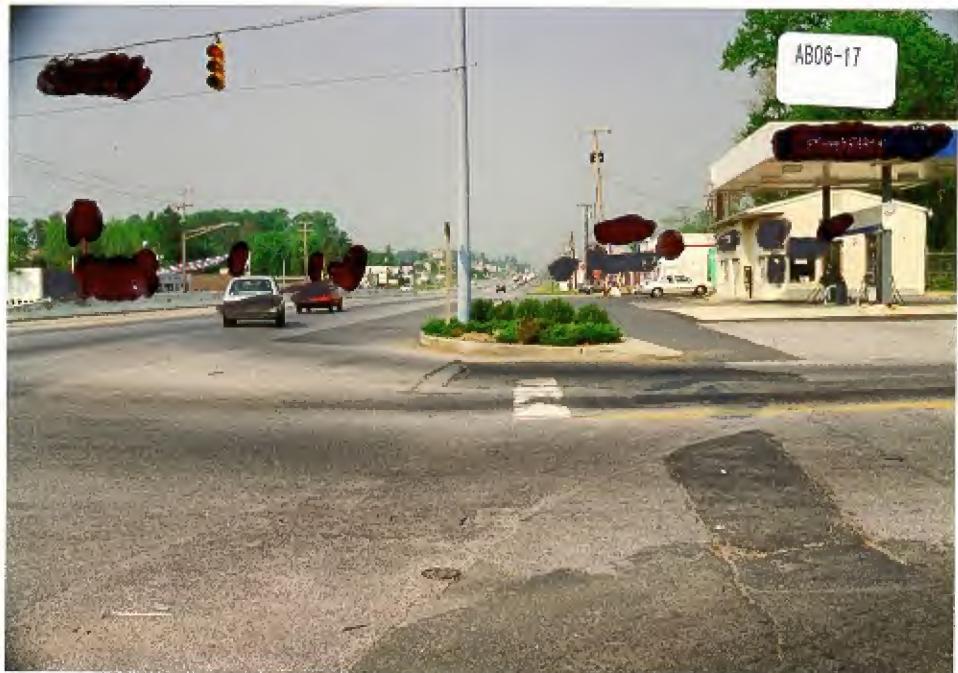




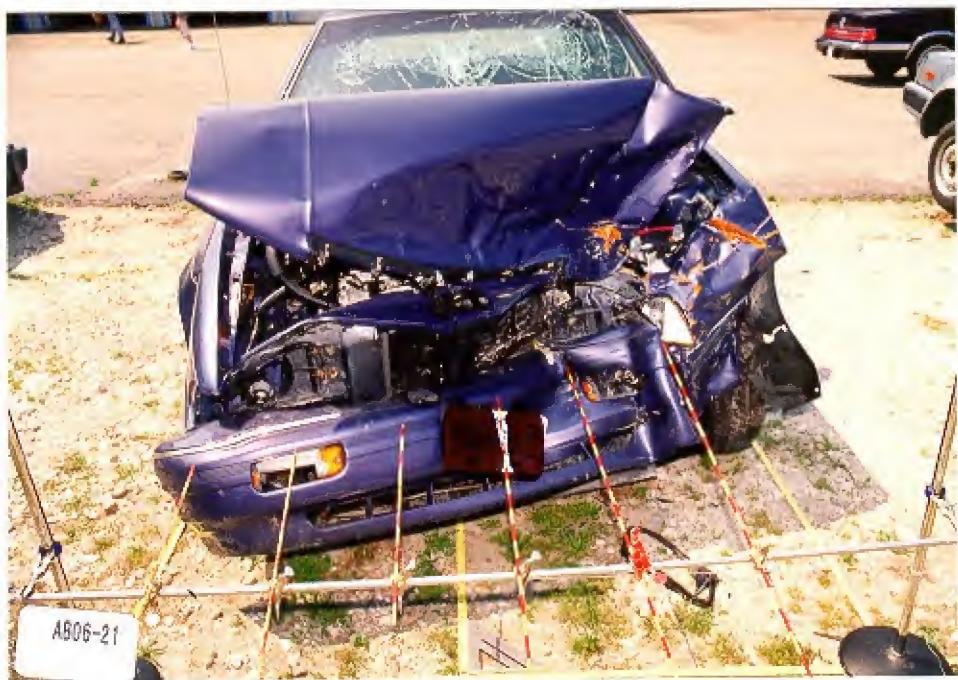












AB06-23



AB06-24







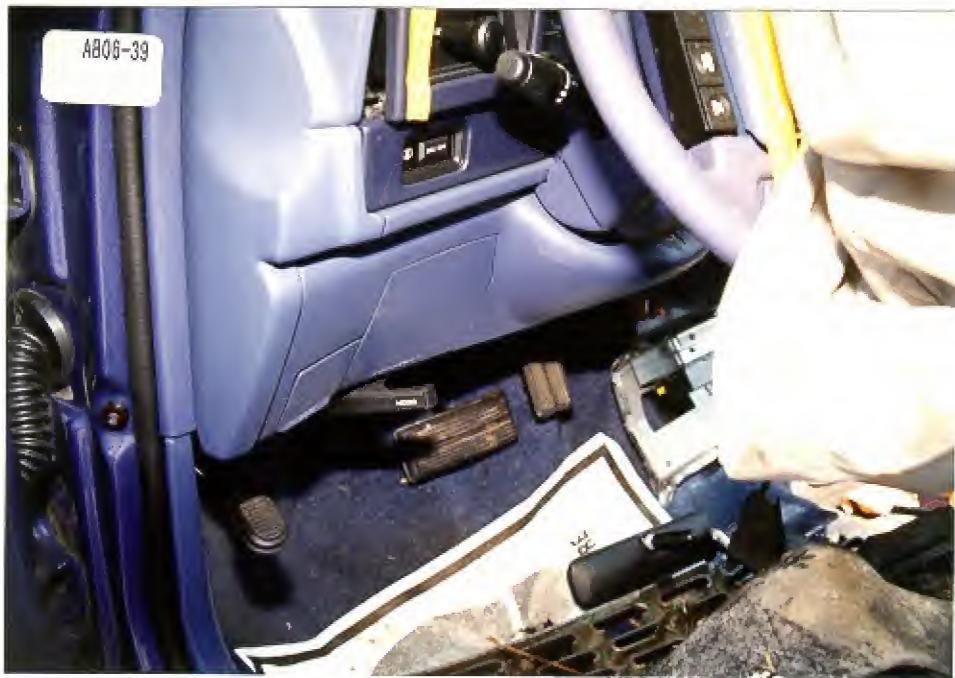








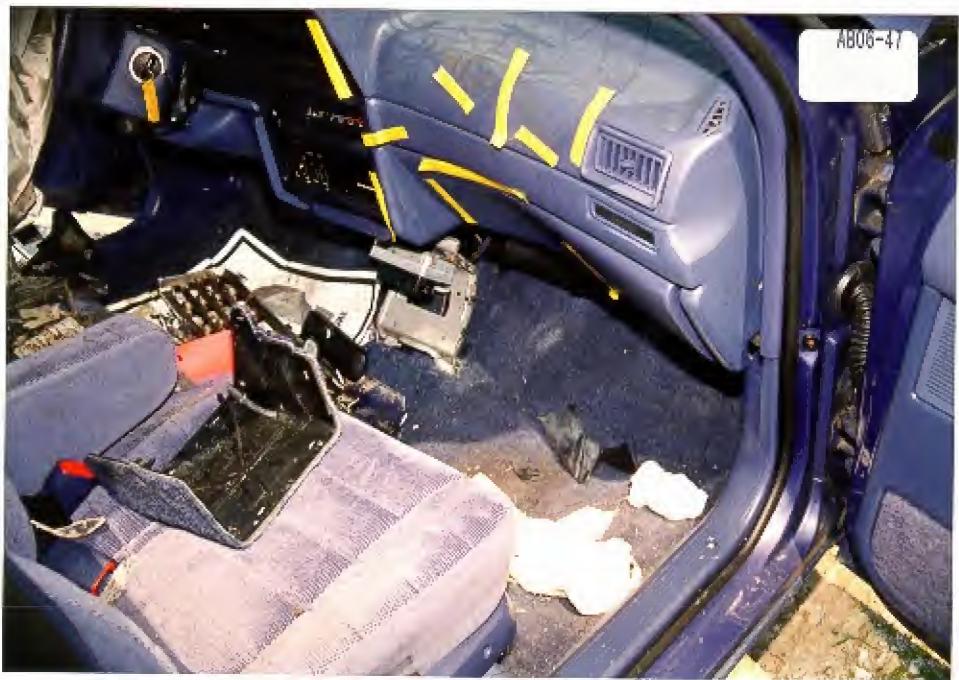


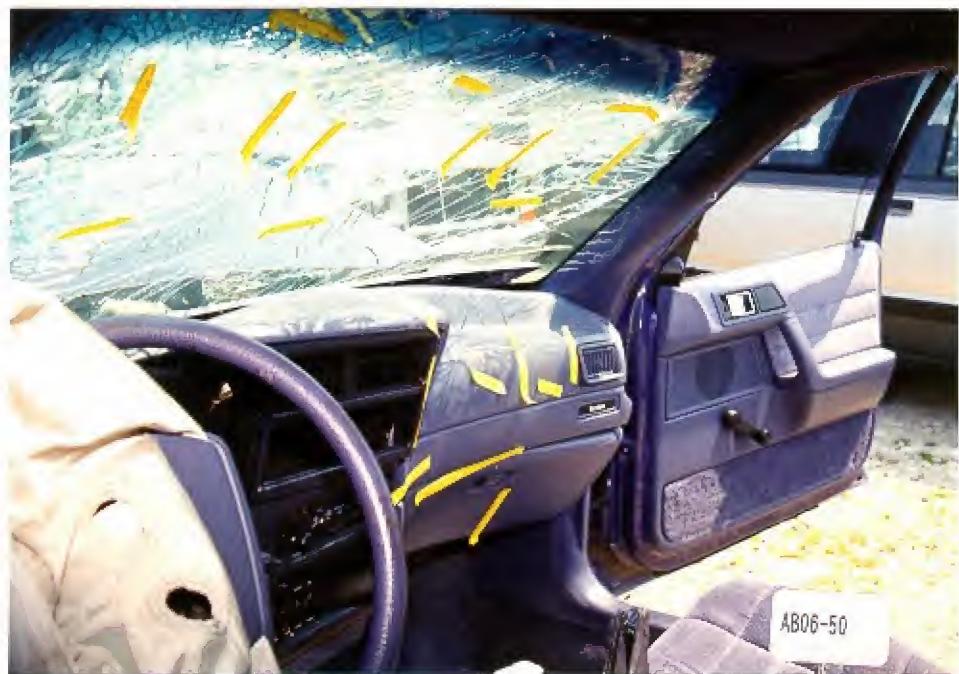


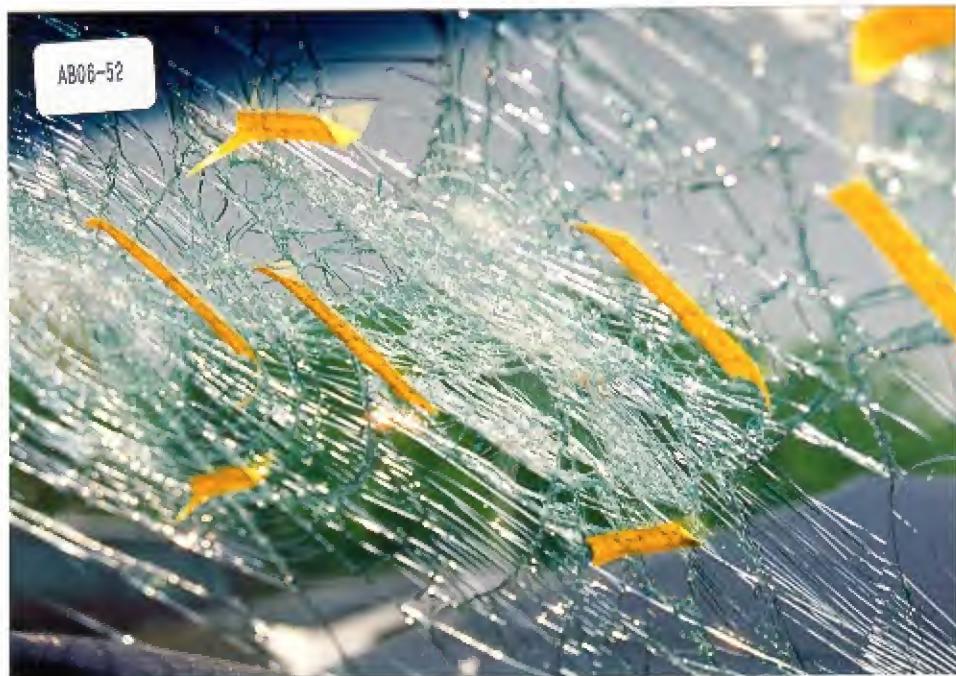
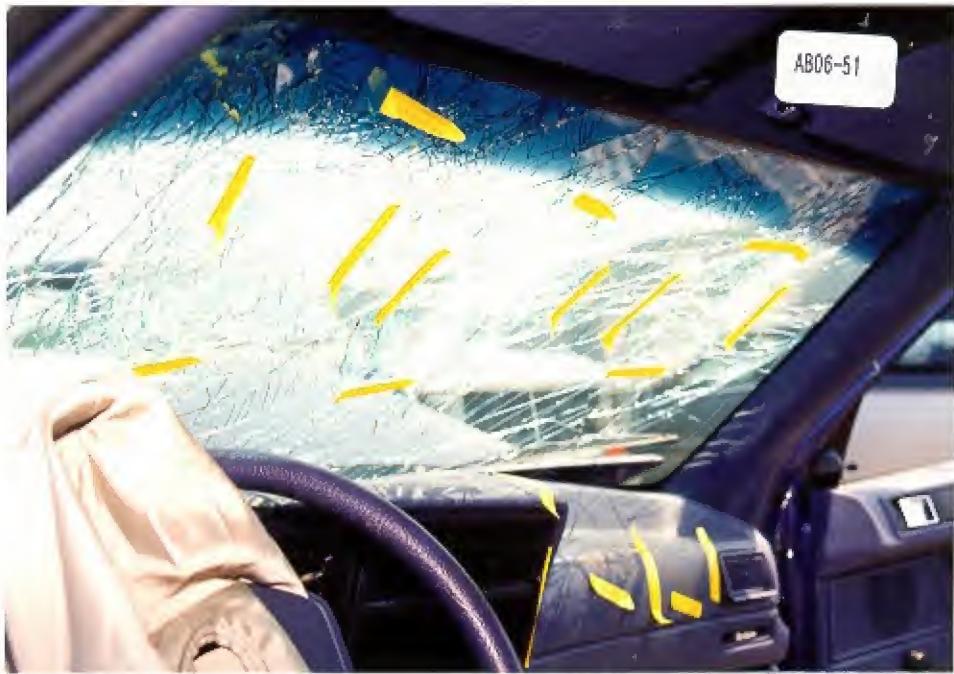


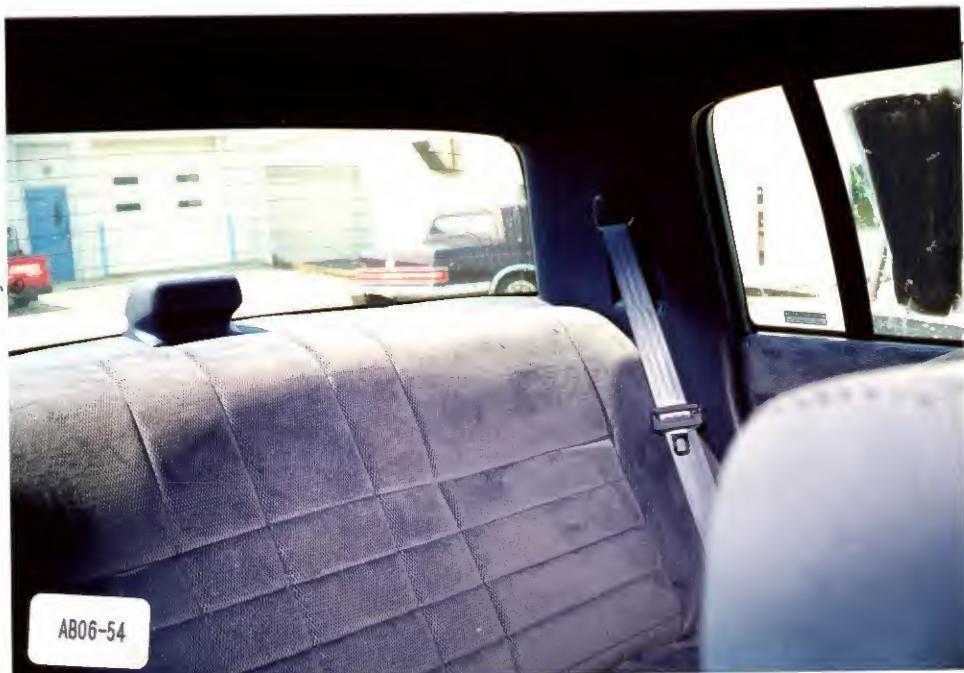


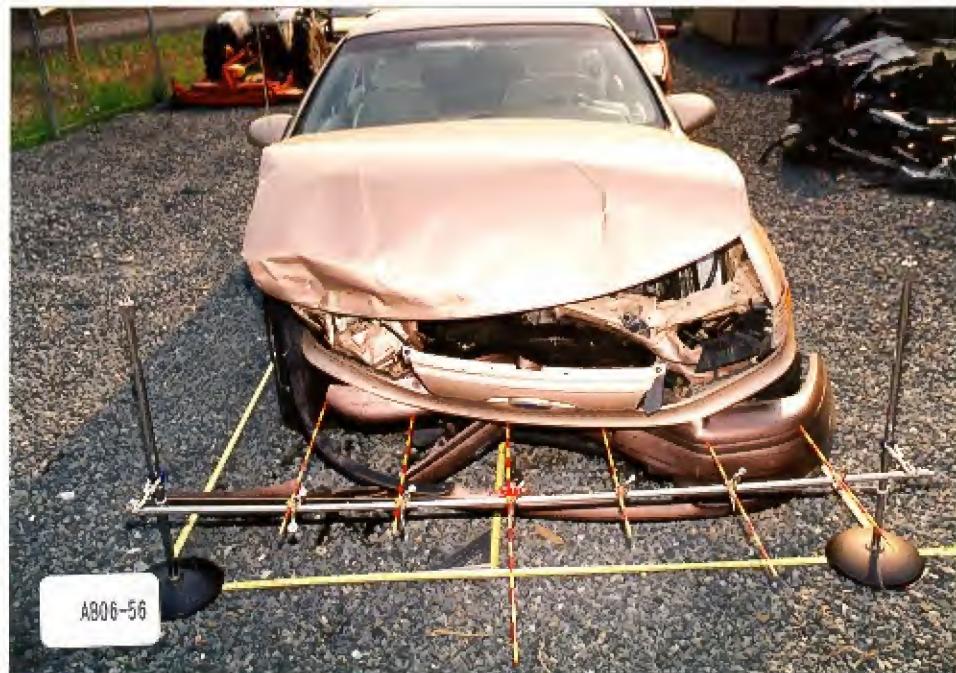
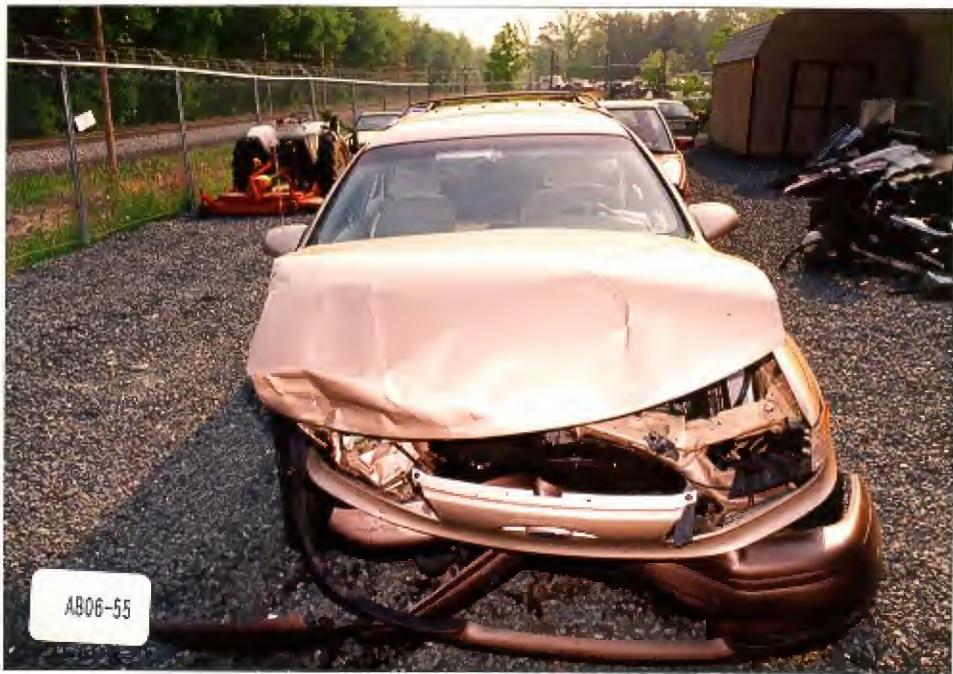


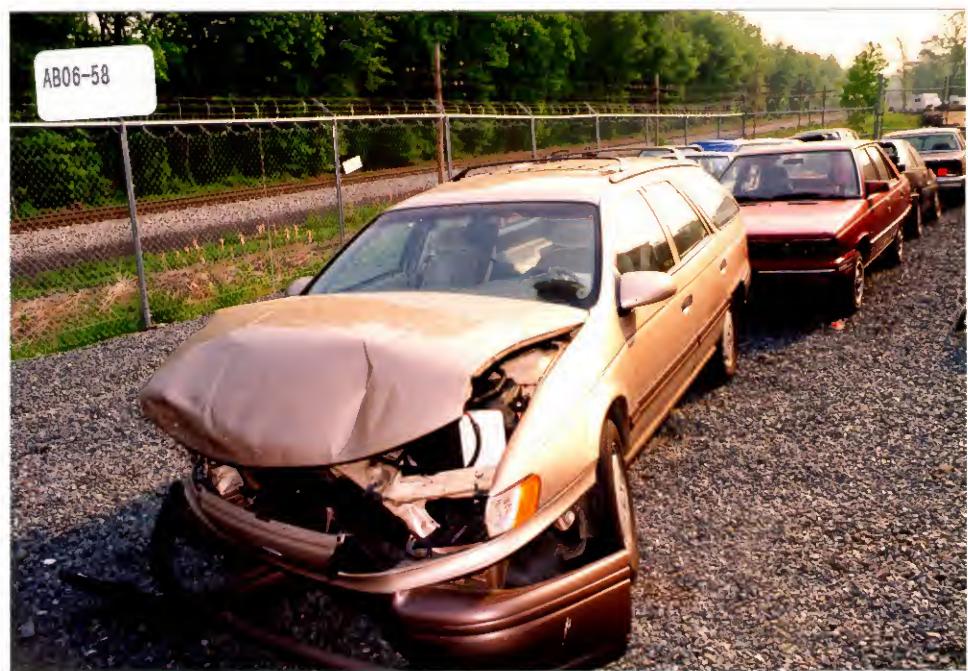


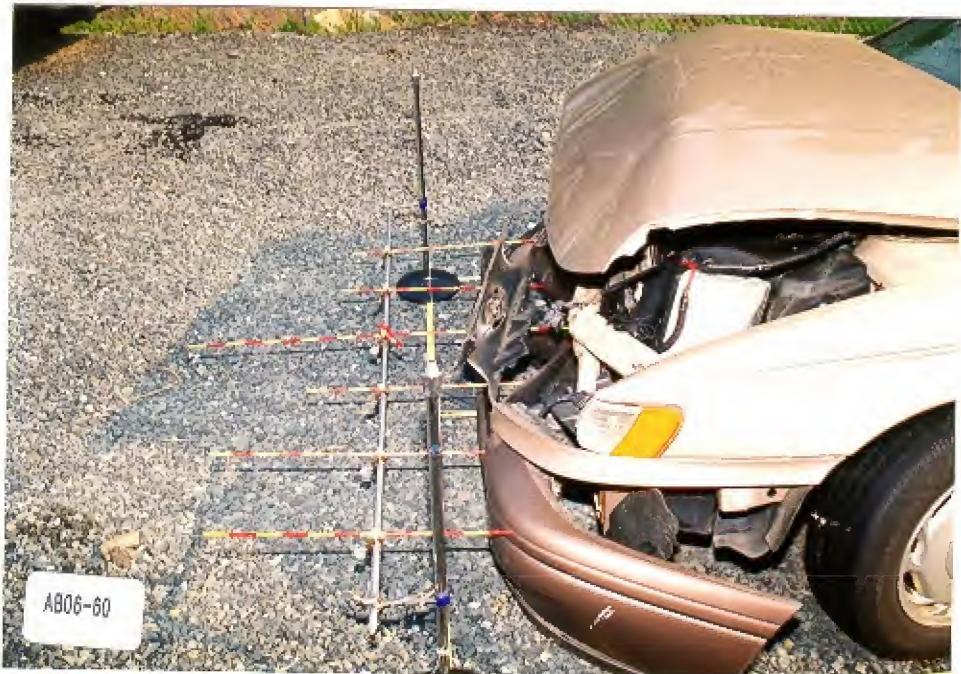


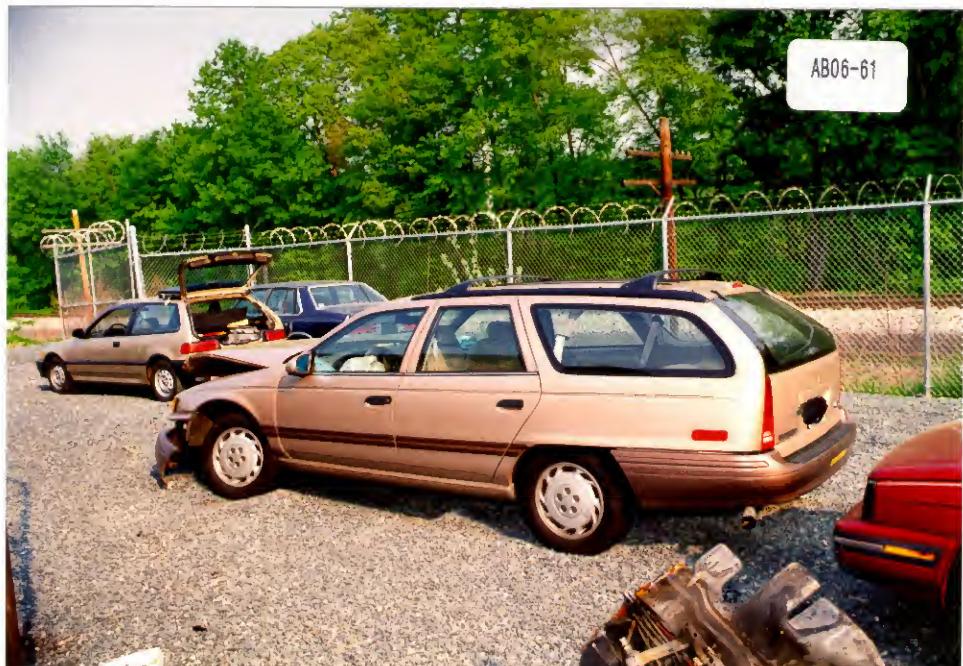


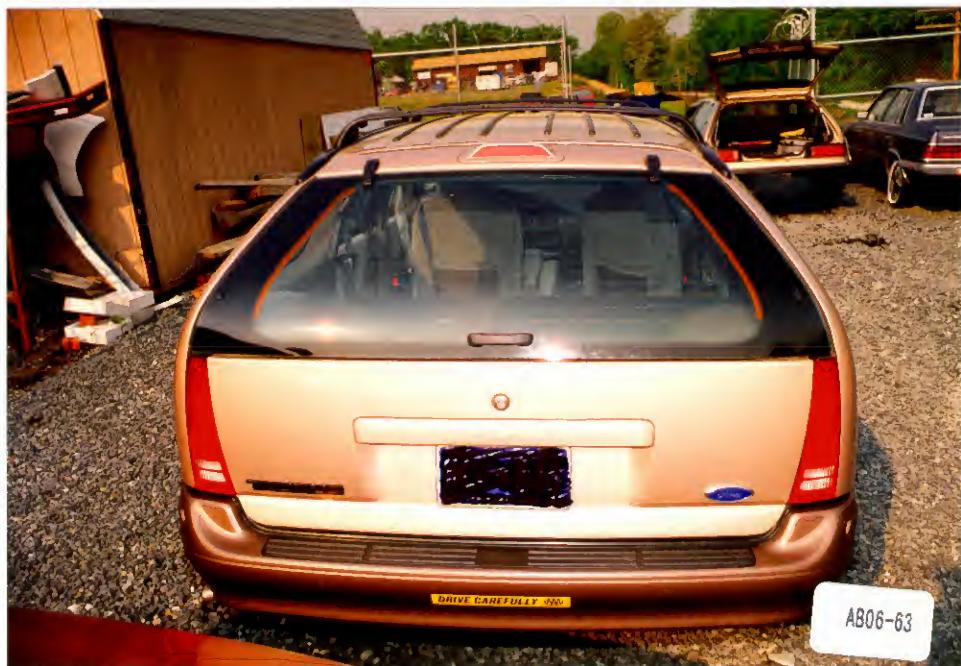


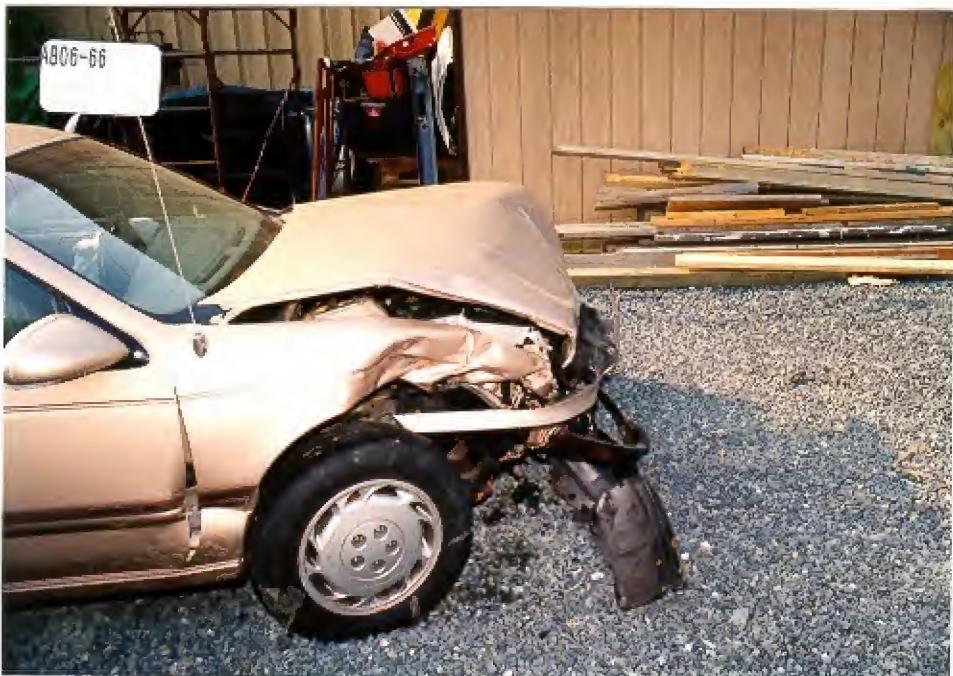






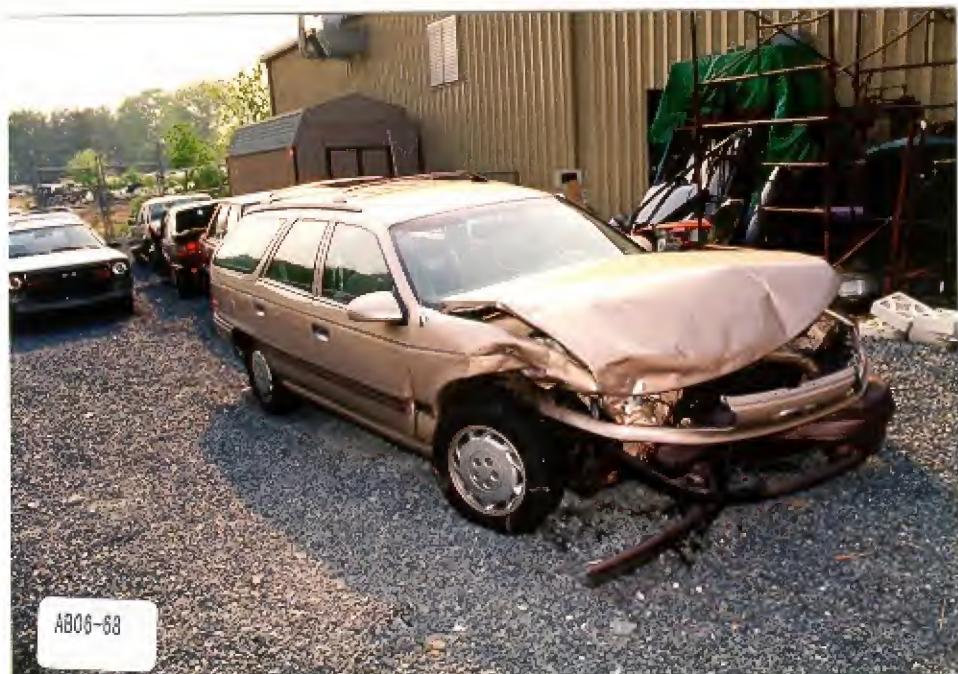




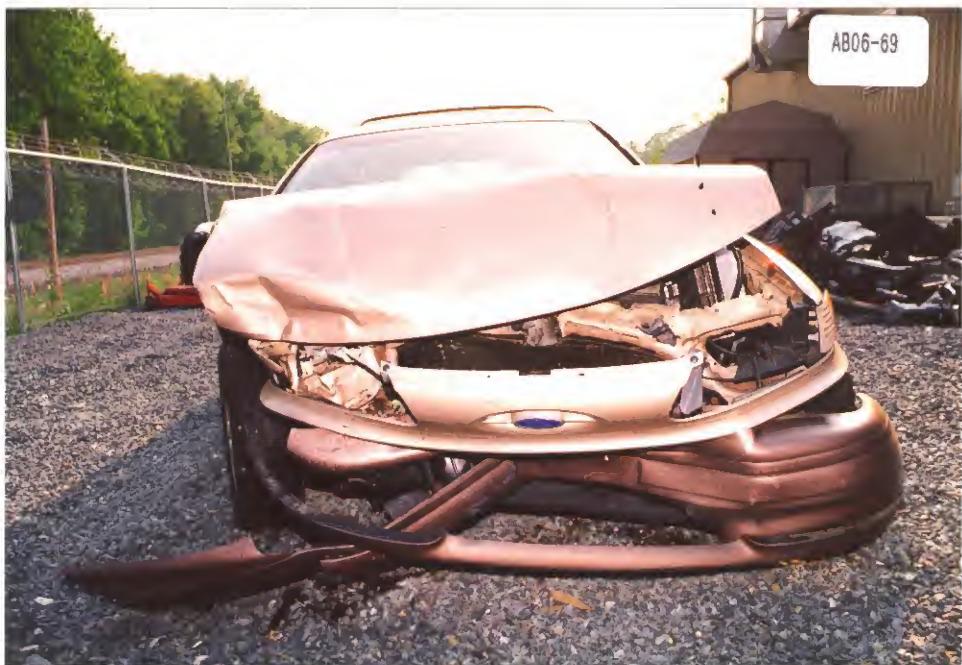




AB06-67



AB06-68



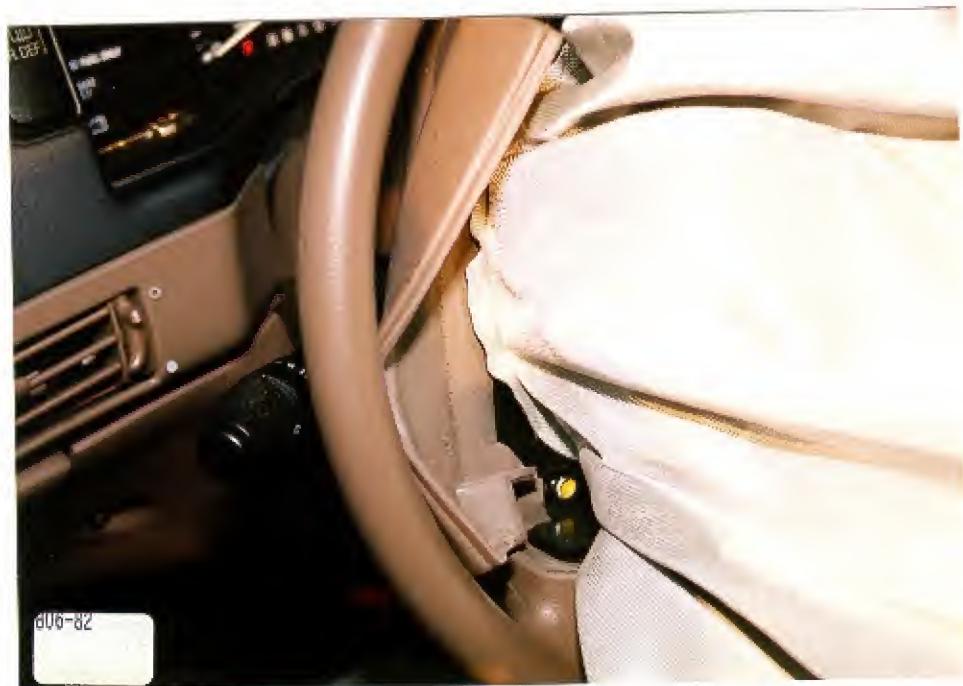






















SLIDE INDEX

Case No. DSI-93-AB-006

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1	Vehicle 1	SE	Approach path, Vehicle 1
2-5	Vehicle 1	NW	Approximate Travel path, Vehicle 1
6	Vehicle 1	NW	Approximate POI, Vehicles 1 and 2
7	Vehicle 1	SE	Approximate Reverse travel path, POI to FRP, Vehicle 1
8	Vehicle 2	N	Approximate FRP, Vehicle 1
9	Vehicle 2	SE	Approximate Reverse travel path, Vehicle 1
10	Vehicle 2	NW	Approach path, Vehicle 2
11-14	Vehicle 2	SE	Approximate Travel path, Vehicle 2
15	Vehicle 1	E	Approximate POI, Vehicles 2 and 1
16-17	Vehicle 1	W	Approximate Travel path, POI to FRP, Vehicle 2
18	Vehicle 2	W	Approximate FRP, Vehicle 2
19	Vehicle 2	NW	Approximate Reverse travel path, Vehicle 2
20-32	Vehicle 1	CCW	Exterior views, Vehicle 1
33-53	Vehicle 1	---	Interior views, Vehicle 1
54-67	Vehicle 2	CCW	Exterior views, Vehicle 2
68-93	Vehicle 2	---	Interior views, Vehicle 2



DS 9306 #1  
Best Available



DS 9306 #2  
Best Available



DS 9306 #3  
Best Available



DS 9306 #4  
Best Available



DS 9306 #5  
Best Available



DS9306 #8  
Best Available



DS9306 #7  
Best Available



DS 9308 #8  
Best Available



DS9306 #9  
Best Available



DS 9306 #10  
Best Available



DS 9306 #11  
Best Available



DS9306 #12  
Best Available



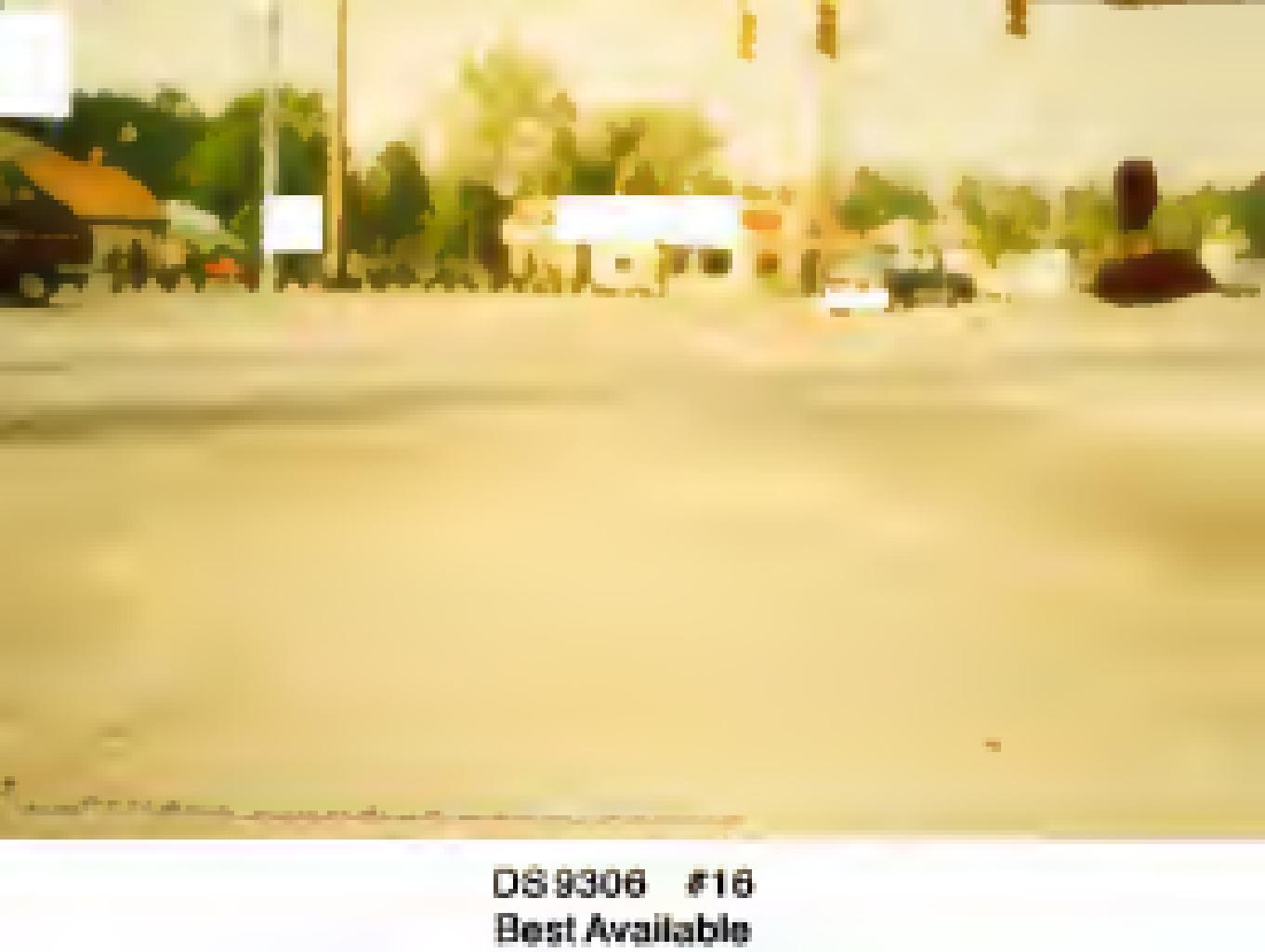
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DS 9306 #14  
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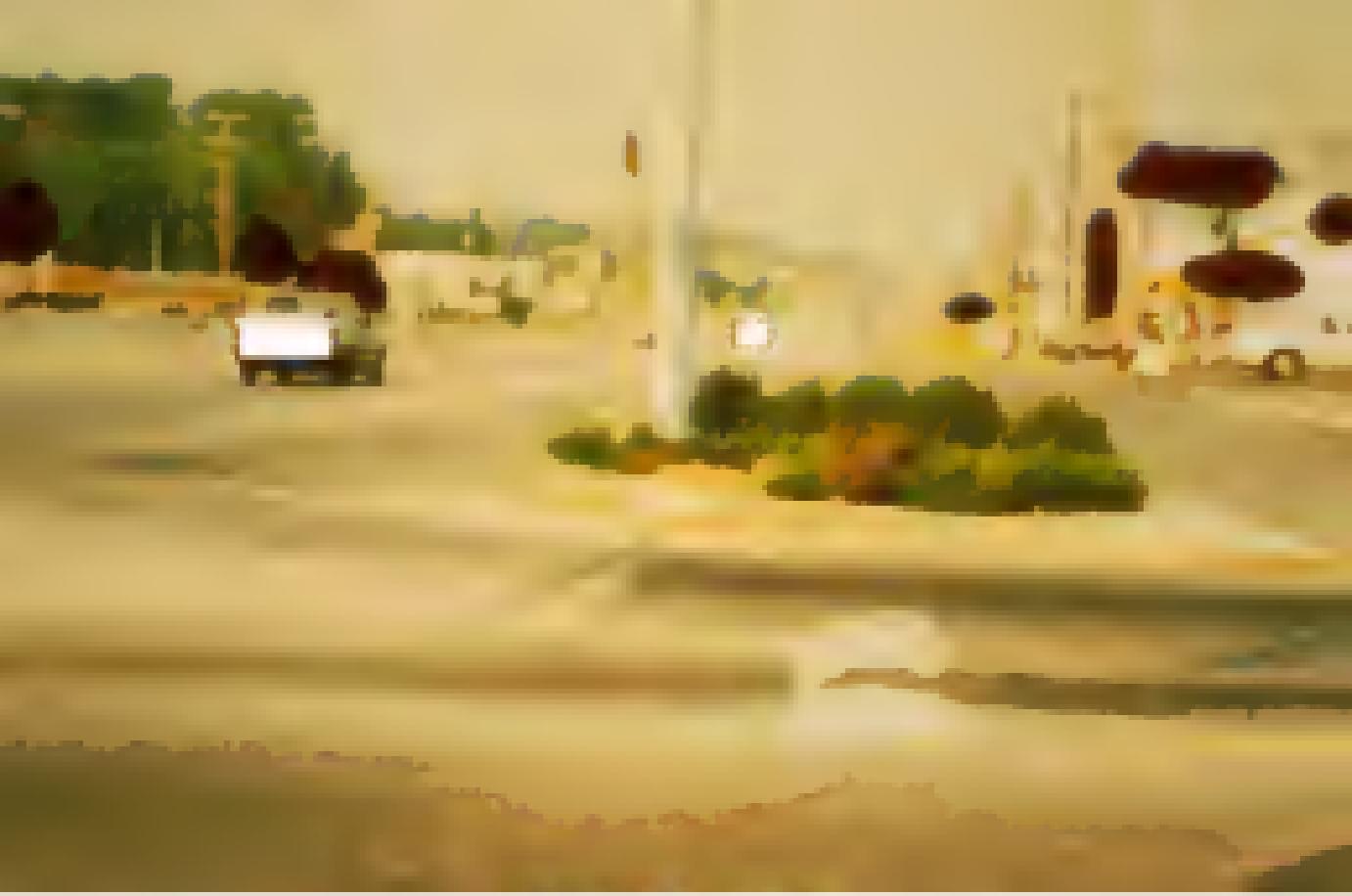
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DS 9306 #16  
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DS 9306 #17  
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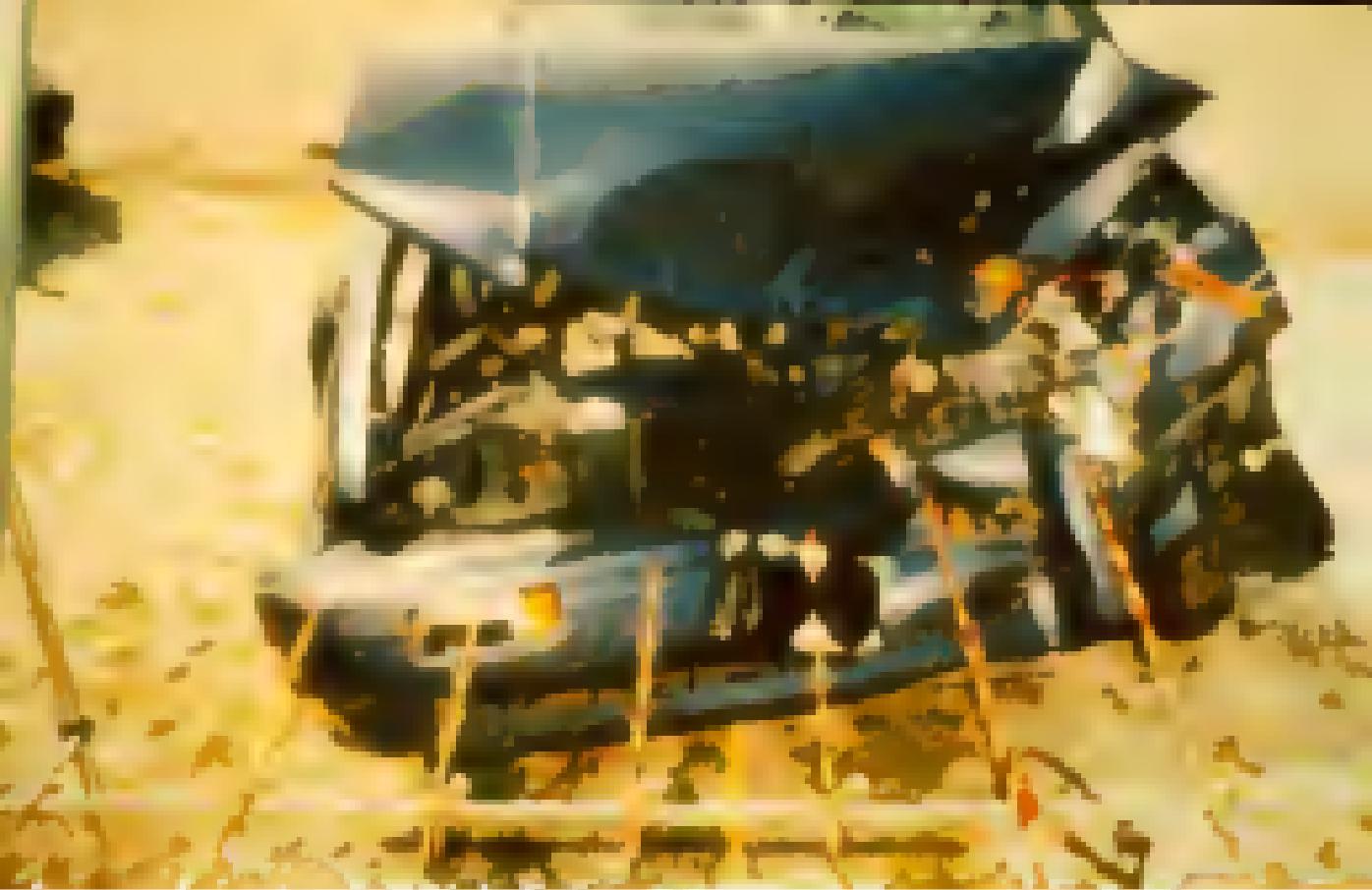
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**Best Available**



DS 9306 #19  
Best Available



DS 9306 #20



DS 9306 #21  
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DS 9306 #22  
Best Available



DS 9306 #23



DS 9306 #24  
Best Available



DS 9308 #25



DS 9300 #20



08 8306 #27



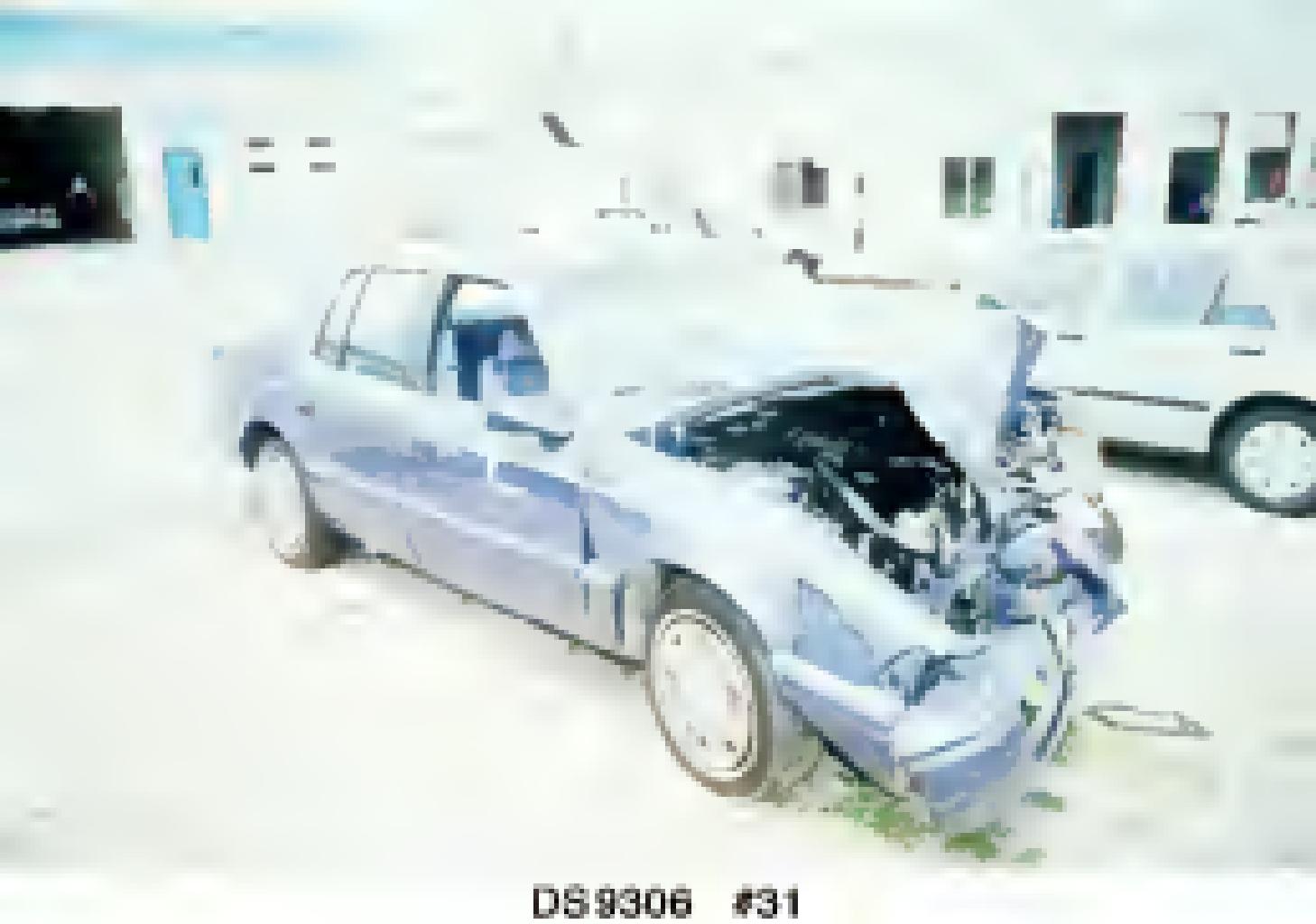
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D89308 #29



DS 9306 #30  
Best Available



DS9306 #31



DS9308 #32



DS 9306 #33  
Best Available



DS 9308 #34  
Best Available



DS 9308 #35  
Best Available



DS 9306 #36  
Best Available



DS 9306 437



DS 9306 #38



DS 9306 #39



DS 9306 #40  
Best Available



DS9306 #41  
Best Available



DS 9306 #42  
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DS 9306 #43



DS9306 #44



DS 9308 #45



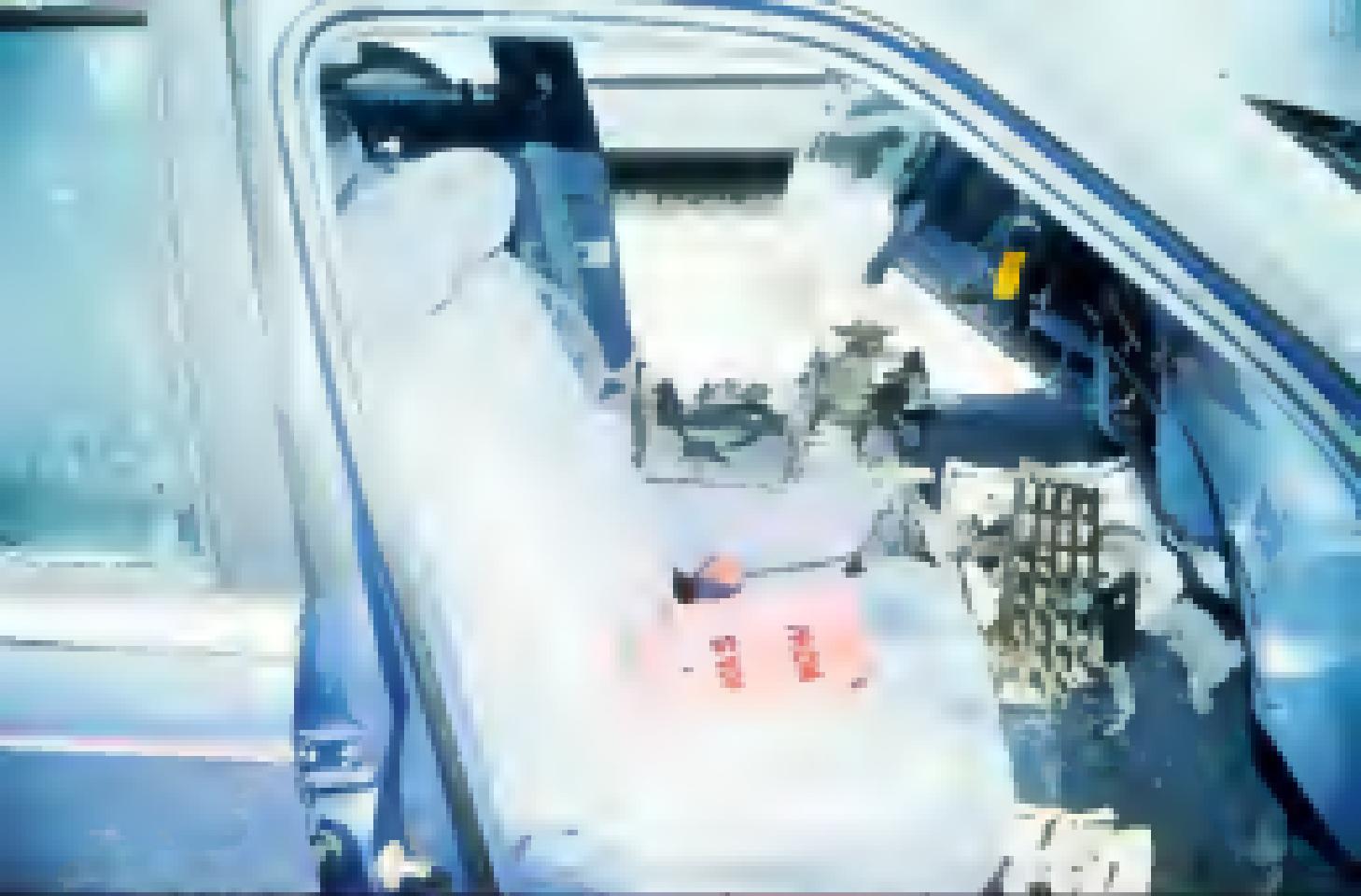
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DS9306 #47



DS9308 #48



089308 #49



DS9306 450



DS9306 #51



DS9306 #52



DS#306 #53



D8 9306 854



DS 9306 #55  
Best Available



DS 9306 #56  
Best Available



DS9306 #57



DS 9306 #58  
Best Available



DS 0306 #50



DS 9306 560



DS9306 #81



089308 #62



DS 9306 463



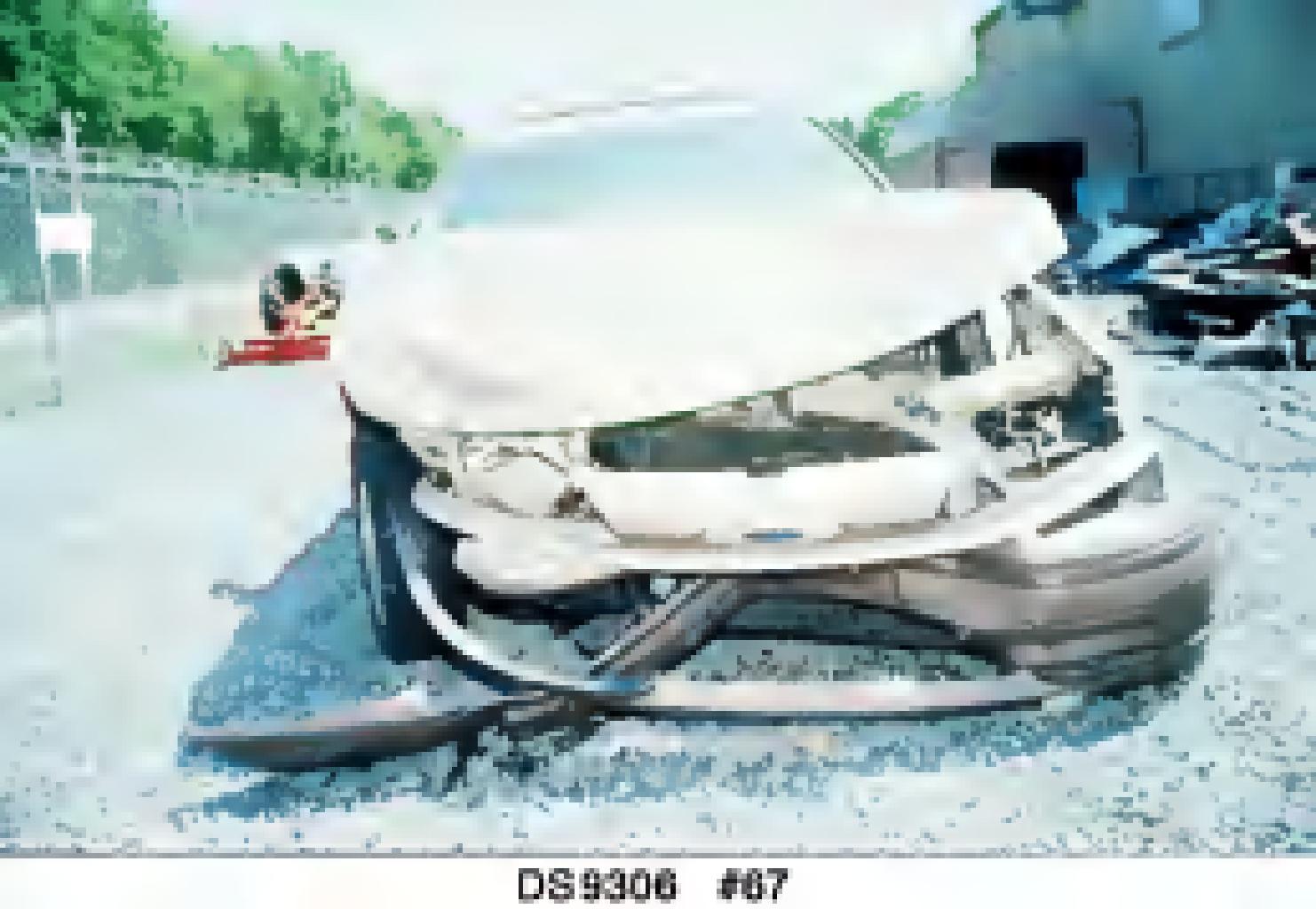
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DS9306 \$85



DS 9306 #6



DS 9306 #67



080308 #68



DS 9306 769



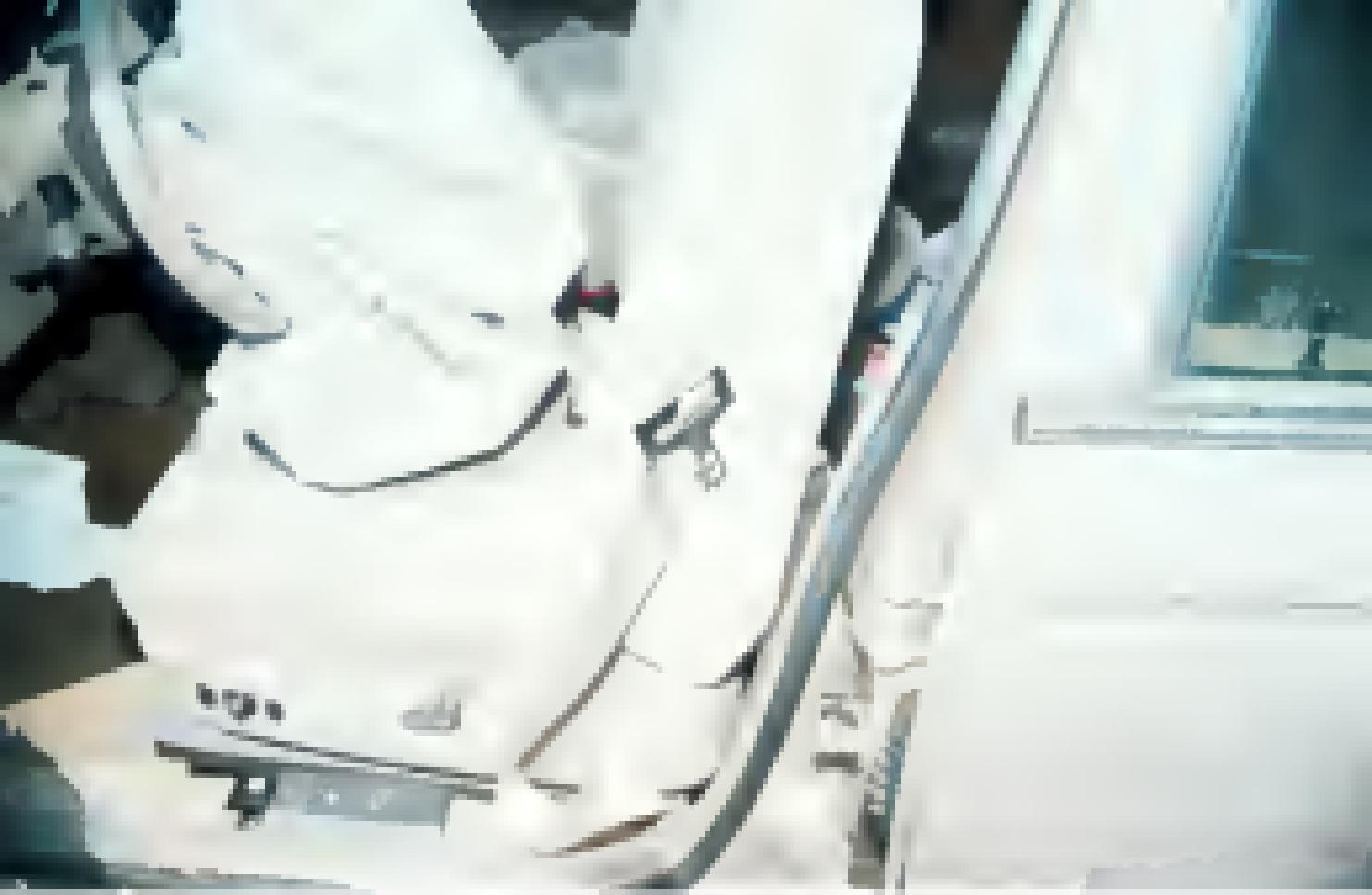
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DS 9306 #72



DS9306 #73



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DS 9308 #75



DS9306 #76



D89306 #77  
Best Available



DS 9906 478  
Best Available



DS 9306 #79  
Best Available



DS 9306 \$80



DS 9306 #81



DS 9306 #82



DS 9306 #63  
Best Available



DS0306 #84

DS9306 #85



D89308 486



DS 9306 487



DS 9306 238



DS9306 #89



D89306 \$90



089306 491

DS 9308 492

DS 9308 #3



# ACCIDENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum DSI-93-AB-006

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted 0 2

4. Date of Accident (Month, Day, Year) SPRING / WEEKDAY / 9 3

5. Time of Accident EVENING

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. SS14 Fatal AOPS 0

7. SS15 Administrative Use 0

8. SS16 0

9. SS17 0

10. SS18 0

## NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 0 1

Code the number of events which occurred in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>0 1</u>	14. <u>0 2</u>	15. <u>F</u>	16. <u>0 2</u>	17. <u>0 3</u>	18. <u>F</u>
19. <u>0 2</u>	20. _____	21. _____	22. _____	23. _____	24. _____	25. _____
26. <u>0 3</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>0 4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase  $\geq$  254 but < 265 cm)
- (03) Intermediate (wheelbase  $\geq$  265 but < 278 cm)
- (04) Full size (wheelbase  $\geq$  278 but < 291 cm)
- (05) Largest (wheelbase  $\geq$  291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle ( $\leq$  4,500 kgs GVWR)
- (13) Passenger van ( $\leq$  4,500 kgs GVWR)
- (14) Other van ( $\leq$  4,500 kgs GVWR)
- (15) Pickup truck ( $\leq$  4,500 kgs GVWR)
- (18) Other truck ( $\leq$  4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck ( $>$  4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

### CDS APPLICABLE AND OTHER VEHICLES

- (0) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

### TDC APPLICABLE VEHICLES

- (0) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo area (rear of trailer or straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

### (01-30) — Vehicle Number

#### Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

---

#### (35) Noncollision injury

- (38) Other noncollision (specify):

---

#### (39) Noncollision — details unknown

#### Collision With Fixed Object

- (41) Tree ( $\leq$  10 cm in diameter)
- (42) Tree ( $>$  10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

#### (45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  10 cm in diameter)
- (51) Pole or post ( $>$  10 cm but  $\leq$  30 cm in diameter)
- (52) Pole or post ( $>$  30 cm in diameter)
- (53) Pole or post (diameter unknown)

#### (54) Concrete traffic barrier

#### (55) Impact attenuator

#### (56) Other traffic barrier (includes guardrail) (specify):

---

#### (57) Fence

- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):

---

#### (69) Unknown fixed object

#### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance

---

#### (75) Vehicle occupant

- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify):

---

#### (89) Unknown nonfixed object

#### (98) Other event (specify):

---

#### (99) Unknown event or object



# GENERAL VEHICLE FORM

1. Primary Sampling Unit Number	— —	11. Police Reported Alcohol Presence	<u>6</u>
2. Case Number - Stratum	DSI-93-AB-006	(0) No alcohol present	
3. Vehicle Number	<u>01</u>	(1) Yes (alcohol present)	
<b>VEHICLE IDENTIFICATION</b>			
4. Vehicle Model Year	<u>93</u>	(7) Not reported	
Code the last two digits of the model year		(8) No driver present	
(99) Unknown		(9) Unknown	
5. Vehicle Make (specify):	<u>09</u>	Note: See variables 37 through 55 (Page 4) for information on Other Drugs	
<u>PLYMOUTH</u>			
Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.		12. Alcohol Test Result For Driver	<u>96</u>
(99) Unknown		Code actual value (decimal implied before first digit—0.xx)	
6. Vehicle Model (specify):	<u>019</u>	(95) Test refused	
<u>ACCLAIM</u>		(96) None given	
Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.		(97) AC test performed, results unknown	
(99) Unknown		(98) No driver present	
7. Body Type	<u>04</u>	(99) Unknown	
Note: Applicable codes may be found on the back of this page.		Source: <u>PAR</u>	
8. Vehicle Identification Number		<b>ACCIDENT RELATED</b>	
<u>1P3XA46K2PF</u> *-*-*-*-*		13. Speed Limit	<u>056</u>
Left justify; Slash zeros and letter Z (0 and Z) No VIN—Code all zeros Unknown—Code all nine's		(000) No statutory limit	
		Code posted or statutory speed limit in kph	
		(999) Unknown	
		<u>35 mph X 1.6093 = 056 kph</u>	
9. Police Reported Vehicle Disposition	<u>1</u>	14. Attempted Avoidance Maneuver	<u>04</u>
(0) Not towed due to vehicle damage		(00) No impact	
(1) Towed due to vehicle damage		(01) No avoidance actions	
(9) Unknown		(02) Braking (no lockup)	
10. Police Reported Travel Speed	<u>999</u>	(03) Braking (lockup)	
Code to the nearest kph (NOTE: 000 means less than 0.5 kph)		(04) Braking (lockup unknown)	
(160) 159.5 kph and above		(05) Releasing brakes	
(999) Unknown		(06) Steering left	
_____ mph X 1.6093 = _____ kph		(07) Steering right	
		(08) Braking and steering left	
		(09) Braking and steering right	
		(10) Accelerating	
		(11) Accelerating and steering left	
		(12) Accelerating and steering right	
		(97) No driver present	
		(98) Other action (specify):	
		(99) Unknown	
15. Accident Type	<u>69</u>		
Applicable codes may be found on the back of page two of this field form			
(00) No impact			
Code the number of the diagram that best describes the accident circumstance			
(98) Other accident type (specify):			
		(99) Unknown	
<b>**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****</b>			

## CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

## Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

## Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Bret, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ( $\leq 4,500$  kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [78 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelair, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ( $\leq 4,500$  kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Venagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vendura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab,  $\leq 4,500$  kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Dateun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500.)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ( $\leq 4,500$  kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

## Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

Medium/Heavy Trucks ( $> 4,500$  kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq$  8,850 kgs)
- (62) Single unit straight truck (8,850 kgs  $<$  GVWR  $\leq$  12,000 kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

## Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

## Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## OCCUPANT RELATED

16. Driver Presence in Vehicle  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown

17. Number of Occupants This Vehicle  
 (00-96) Code actual number of occupants  
 for this vehicle  
 (97) 97 or more  
 (99) Unknown

18. Number of Occupant Forms Submitted 0 4

## VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1.260  
 \_\_\_\_\_ Code weight to nearest  
 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown

1.2784 lbs X .4536 = 1.263 kgs

Source: \_\_\_\_\_

20. Vehicle Cargo Weight 0.000  
 \_\_\_\_\_ Code weight to nearest  
 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown

\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

## RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes—towed trailing unit  
 (9) Unknown

22. Documentation of Trajectory Data  
 for This Vehicle 0  
 (0) No  
 (1) Yes

23. Post Collision Condition of Tree or Pole  
 (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with  
 tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 (9) Unknown

## 24. Rollover

(0) No rollover (no overturning)

*Rollover (primarily about the longitudinal axis)*

(1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_

(5) Rollover--end-over-end (i.e., primarily  
 about the lateral axis)  
 (9) Rollover (overturn), details unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 026. Rear Override/Underride (this Vehicle) 0

(0) No override/underride, or  
 not an end-to-end impact

*Override (see specific CDC)*

(1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_

*Underride (see specific CDC)*

(4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_

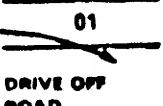
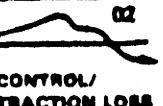
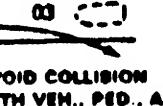
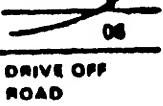
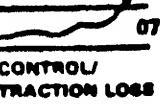
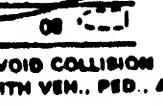
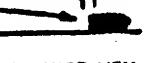
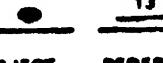
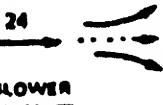
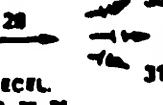
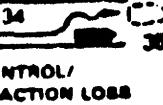
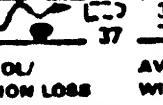
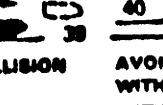
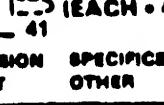
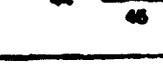
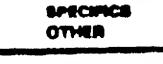
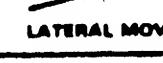
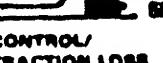
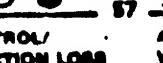
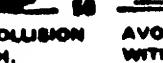
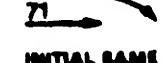
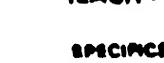
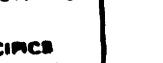
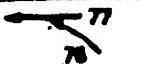
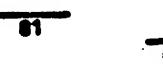
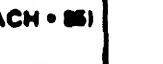
(7) Medium/heavy truck or bus override  
 (9) Unknown

HEADING ANGLE AT IMPACT FOR  
 HIGHEST DELTA V

Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

27. Heading Angle For This Vehicle 3 2 5

28. Heading Angle For Other Vehicle 1 0 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)						
I Single Driver	A Right Roadside Departure				04	05	SPECIFICS UNKNOWN	
	B Left Roadside Departure				09	10	SPECIFICS UNKNOWN	
	C Forward Impact					15	16	SPECIFICS UNKNOWN
Same Trafficway Same Direction	D Rear-End					(EACH • 32)	(EACH • 33)	SPECIFICS UNKNOWN
	E Forward Impact					(EACH • 42)	(EACH • 43)	SPECIFICS UNKNOWN
	F Sideswipe Angle				(EACH • 48)	(EACH • 49)	SPECIFICS UNKNOWN	SPECIFICS UNKNOWN
III Same Trafficway (Opposite Direction)	G Head-On		(EACH • 52)	(EACH • 53)	SPECIFICS UNKNOWN	SPECIFICS UNKNOWN		
	H Forward Impact					(EACH • 62)	(EACH • 63)	SPECIFICS UNKNOWN
	I. Sideswipe Angle		(EACH • 66)	(EACH • 67)	SPECIFICS UNKNOWN	SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J. Turn Across Path						(EACH • 74)	(EACH • 75)
	K. Turn Into Path						(EACH • 84)	(EACH • 85)
V Interacting Paths (Vehicle Damage)	L. Straight Paths			(EACH • 90)	(EACH • 91)	SPECIFICS UNKNOWN	SPECIFICS UNKNOWN	
VI Miscellaneous	M. Backing Etc.		93 OTHER VEH. OR OBJECT	98 Other Accident Type	99 Unknown Accident Type	00 No Impact		

## 29. Basis for Total Delta V (highest)

*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

**COMPUTER GENERATED DELTA V**

Secondary      Highest

## 30. Total Delta V

3 8  
(23 mph)37.5 Nearest kph  
(23.3 mph)

(NOTE: 000 means less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

## 31. Longitudinal Component of Delta V

-3 8  
(-23 mph)-37.5 Nearest kph  
(-23.3 mph)

(NOTE: 000 means greater than -0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

Secondary      Highest  
32. Lateral Component of Delta V 0 2  
(+0.1 mph)1.9 Nearest kph  
(1.2 mph)

(NOTE: 000 means greater than -0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

33. Energy Absorption 1 0 7  
(79,100 joules)107.2 Nearest 100 joules  
(79,100)

(NOTE: 000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

## 34. Confidence In Reconstruction Program Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

## 35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify): \_\_\_\_\_

## 36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE?  YES  NOIF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED?  YES  NO

<p>37. Police Reported Other Drug Presence <u>✓</u></p> <p>(0) No other drugs present      (1) Yes (other drug present)      (7) Not reported      (8) No driver present      (9) Unknown</p>	<p><b>DRUG EVALUATION CLASSIFICATION</b>  <b>OTHER DRUGS TEST RESULTS FOR DRIVER</b></p> <table border="1"> <thead> <tr> <th></th> <th>DEC Test Results</th> <th>Specimen Test Results</th> </tr> </thead> <tbody> <tr> <td>Narcotic Drug</td> <td>40. <u>✓</u></td> <td>41. <u>✓</u></td> </tr> <tr> <td>Depressant Drug</td> <td>42. <u>✓</u></td> <td>43. <u>✓</u></td> </tr> <tr> <td>Stimulant Drug</td> <td>44. <u>✓</u></td> <td>45. <u>✓</u></td> </tr> <tr> <td>Hallucinogen Drug</td> <td>46. <u>✓</u></td> <td>47. <u>✓</u></td> </tr> <tr> <td>Cannabinoid Drug</td> <td>48. <u>✓</u></td> <td>49. <u>✓</u></td> </tr> <tr> <td>Phencyclidine (PCP)</td> <td>50. <u>✓</u></td> <td>51. <u>✓</u></td> </tr> <tr> <td>Inhalant Drug</td> <td>52. <u>✓</u></td> <td>53. <u>✓</u></td> </tr> <tr> <td>Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)</td> <td>54. <u>✓</u></td> <td>55. <u>✓</u></td> </tr> </tbody> </table>		DEC Test Results	Specimen Test Results	Narcotic Drug	40. <u>✓</u>	41. <u>✓</u>	Depressant Drug	42. <u>✓</u>	43. <u>✓</u>	Stimulant Drug	44. <u>✓</u>	45. <u>✓</u>	Hallucinogen Drug	46. <u>✓</u>	47. <u>✓</u>	Cannabinoid Drug	48. <u>✓</u>	49. <u>✓</u>	Phencyclidine (PCP)	50. <u>✓</u>	51. <u>✓</u>	Inhalant Drug	52. <u>✓</u>	53. <u>✓</u>	Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>✓</u>	55. <u>✓</u>
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Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>✓</u>	55. <u>✓</u>																										
<p>38. Police Reported Drug Evaluation Classification <u>✓</u></p> <p>(DEC) Test For Driver</p> <p>(0) No DEC process available or given      (1) DEC process given, results known      (2) DEC process given, results unknown      (3) DEC process available, unknown if given      (8) No driver present</p>	<p><b>Codes For DEC Test Results</b></p> <p>(0) No DEC test given      (1) Passed DEC test      (2) Failed DEC test      (3) DEC test given—results unknown      (8) No driver present      (9) Unknown if DEC test given</p>																											
<p>39. Other Drug Specimen Test Type For Driver <u>✓</u></p> <p>(0) No specimen test given      (1) Blood test      (2) Urine test      (3) Other specimen tests (specify):  <u>(7) Unspecified specimen test</u>  <u>(8) No driver present</u>  <u>(9) Unknown if specimen test given</u></p>	<p><b>Codes for Specimen Test Results</b></p> <p>(0) No specimen test given      (1) Drug not found in specimen      (2) Drug found in specimen      (7) Specimen test given, results unknown or not obtained      (8) No driver present      (9) Unknown if specimen test given</p>																											

**OTHER DATA****56. Driver's Zip Code**

(00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

**57. Driver's Race/Ethnic Origin**

(0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**58. Vehicle Special Use (This Trip)**

(0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

**59. Rollover Initiation Type**

(0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify): \_\_\_\_\_  
 (9) Unknown rollover initiation type

**60. Location of Rollover Initiation**

(0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

**61. Rollover Initiation Object Contacted**Ø Ø**62. Location on Vehicle Where Initial Principal Tripping Force Is Applied**Ø

(0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Underrcarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (8) Non-contact rollover forces (specify): \_\_\_\_\_  
 (9) Unknown

**63. Direction of Initial Roll**Ø

(0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

**PRECRASH DATA****64. Pre-Event Movement (Prior to Recognition of Critical Event)**Ø 1

(01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (17) Other (specify): \_\_\_\_\_  
 (98) No driver present  
 (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover

(01-30) — Vehicle Number

### Noncollision

(31) Turn-over — fall-over  
(33) Jackknife

### Collision With Fixed Object

(41) Tree ( $\leq$  10 cm in diameter)  
(42) Tree ( $>$  10 cm in diameter)  
(43) Shrubbery or bush  
(44) Embankment

(45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

(50) Pole or post ( $\leq$  10 cm in diameter)  
(51) Pole or post ( $>$  10 cm but  $\leq$  30 cm in diameter)  
(52) Pole or post ( $>$  30 cm in diameter)  
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object

### Collision with Nonfixed Object

(71) Motor vehicle not in-transport  
(76) Animal  
(77) Train  
(78) Trailer, disconnected in transport  
(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object

## PRECRASH DATA (Continued)

65. Critical Precrash Event 6 2*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): \_\_\_\_\_

(99) Unknown

For Corrective Actions Attempted see variable GV14  
(Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 2

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Pre crash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



**U.S. Department of Transportation  
National Highway Traffic Safety  
Administration**

## **EXTERIOR VEHICLE FORM**

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number	_____	3. Vehicle Number	<u>41</u>
2. Case Number - Stratum	DSI-93-AB-446		

## VEHICLE IDENTIFICATION

VIN 1P3XA46K2PF \*-\*-\*-\*-\*-\*-\* Model Year 93

Vehicle Make (specify): PLYMOUTH      Vehicle Model (specify): ACCLAIM 4-DOOR

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
01	BEGINS LEFT FRONT BUMPER CORNER	FULL FRONTAL

## CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure and document on the vehicle diagram the location of maximum crush.**

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

**Use as many lines/columns as necessary to describe each damage profile.**

# ORIGINAL SPECIFICATIONS WORK SHEET

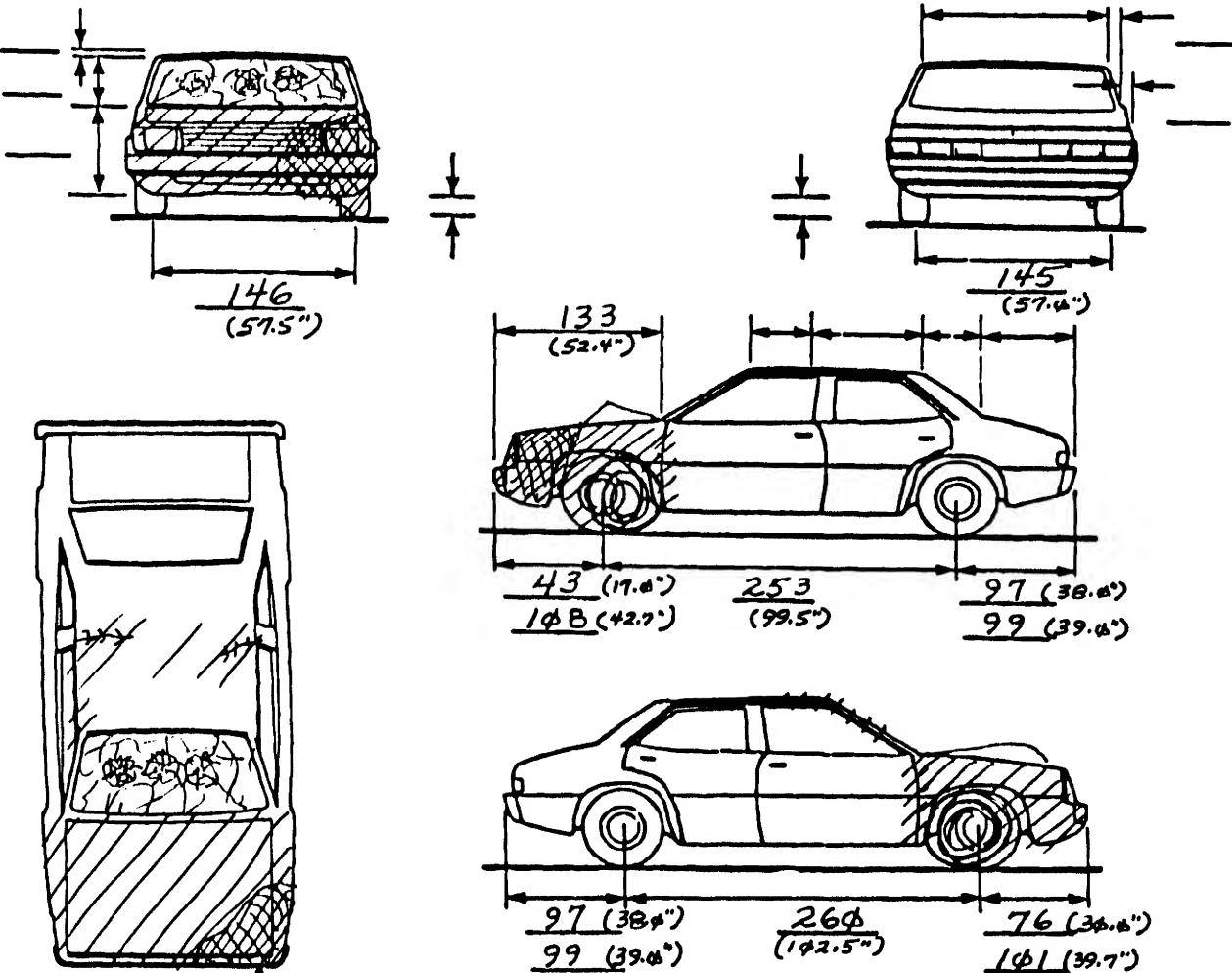
Wheelbase	<u>1</u> <u>4</u> <u>3</u> <u>.5</u> inches x 2.54 =	<u>2</u> <u>6</u> <u>3</u> cm
Overall Length	<u>1</u> <u>8</u> <u>1</u> <u>.2</u> inches x 2.54 =	<u>4</u> <u>6</u> <u>4</u> cm
Maximum Width	<u>4</u> <u>6</u> <u>7</u> <u>.3</u> inches x 2.54 =	<u>1</u> <u>7</u> <u>1</u> cm
Curb Weight	<u>4</u> <u>2</u> <u>.7</u> <u>8</u> <u>4</u> pounds x .4536 =	<u>1</u> <u>2</u> <u>6</u> <u>3</u> kg
Average Track	<u>4</u> <u>5</u> <u>7</u> <u>.4</u> inches x 2.54 =	<u>1</u> <u>4</u> <u>6</u> cm
Front Overhang	<u>4</u> <u>3</u> <u>8</u> <u>.6</u> inches x 2.54 =	<u>4</u> <u>9</u> <u>8</u> cm
Rear Overhang	<u>4</u> <u>3</u> <u>9</u> <u>.1</u> inches x 2.54 =	<u>4</u> <u>2</u> <u>9</u> cm
Undeformed End Width	<u>4</u> <u>6</u> <u>4</u> <u>.4</u> inches x 2.54 =	<u>1</u> <u>5</u> <u>2</u> cm
Engine Size: cyl./displ.	<u>2</u> <u>5</u> <u>4</u> <u>4</u> cc x .001 =	<u>2.5</u> L
	<u>1</u> <u>5</u> <u>2</u> CID x .0164 =	<u>2.5</u> L

## VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE		ORIGINAL SPECIFICATIONS		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)
a. Rotation physically restricted	b. Tire deflated	Wheelbase	263 cm	RF $\pm$ <u>—</u> ° LF $\pm$ <u>—</u> ° RR $\pm$ <u>—</u> ° LR $\pm$ <u>—</u> °
RF <u>2</u> LF <u>1</u> RR <u>2</u> LR <u>2</u>	RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>	Overall Length	468 cm	Within $\pm$ 5 degrees
(1) Yes (2) No (8) NA (9) Unk.		Maximum Width	171 cm	
		Curb Weight	1263 kg	
		Average Track	146 cm	
		Front Overhang	98 cm	DRIVE WHEELS
		Rear Overhang	99 cm	<input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD
		Undeformed End Width	152 cm	
		Engine Size: cyl./displ.	I4 / 2.5 L	Approximate Cargo Weight <u>—</u> kg
TYPE OF TRANSMISSION				
<input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic				

GAUGE STANDS AOL

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

~~AX~~  
~~CRUSH~~

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.



## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>Ø 1</u>	5. <u>Ø 2</u>	6. <u>1 2</u>	7. <u>F</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>W</u>	11. <u>Ø 3</u>

## Second Highest Delta "V"

12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_ 16. \_\_\_\_\_ 17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>± D</u>
<u>1 5 2</u> (60")	<u>Ø 6 Ø</u> (24")	<u>Ø 7 7</u> (34")	<u>Ø 5 1</u> (24")	<u>Ø 3 6</u> (14")	<u>Ø 2 5</u> (10")	<u>Ø 2 Ø</u> (8")	<u>Ø Ø 3 8</u> (-15")

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>± D</u>
-----	-----	-----	-----	-----	-----	-----	<u>+</u> <u>-</u>

26. Are CDCs Documented but Not Coded on The Automated File?  
 (0) No  
 (1) Yes

Ø

27. Researcher's Assessment of Vehicle Disposition  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

28. Original Wheelbase \_\_\_\_\_ Code to the \_\_\_\_\_ nearest centimeter  
 (999) Unknown

2 6 31 Ø 3 · 5 inches X 2.54 = 2 6 3 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

(0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

(9) Unknown if vehicle is modified

## 30. Fire Occurrence

(0) No fire

Yes, fire occurred

(1) Minor  
(2) Major  
(9) Unknown

## 31. Origin of Fire

(0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

(9) Unknown

## 32. Type of Fuel Tank

(0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



# INTERIOR VEHICLE FORM

## GLAZING

1. Primary Sampling Unit Number \_\_\_\_\_  
2. Case Number - Stratum DSI-93-AB-006  
3. Vehicle Number 0 1

## INTEGRITY

4. Passenger Compartment Integrity 0 0  
(00) No integrity loss  
  
Yes, Integrity Was Lost Through  
(01) Windshield  
(02) Door (side)  
(03) Door/hatch (back door)  
(04) Roof  
(05) Roof glass  
(06) Side window  
(07) Rear window (backlight)  
(08) Roof and roof glass  
(09) Windshield and door (side)  
(10) Windshield and roof  
(11) Side and rear window (side window and backlight)  
(12) Windshield and side window  
(13) Door and side window  
(98) Other combination of above (specify):  
  
(99) Unknown

### Door, Tailgate or Hatch Opening

5. LF 0 6. RF 0 7. LR 0 8. RR 0 9. TG/H 0  
(0) No door/gate/hatch  
(1) Door/gate/hatch remained closed and operational  
(2) Door/gate/hatch came open during collision  
(3) Door/gate/hatch jammed shut  
(8) Other (specify):  
  
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0  
(0) No door/gate/hatch or door not opened  
  
Door, Tailgate or Hatch Came Open During Collision  
(1) Door operational (no damage)  
(2) Latch/striker failure due to damage  
(3) Hinge failure due to damage  
(4) Door structure failure due to damage  
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage  
(6) Latch/striker and hinge failure due to damage  
(8) Other failure (specify):  
  
(9) Unknown

### Glazing Damage from Impact Forces

15. WS 0 16. LF 0 17. RF 0 18. LR 0 19. RR 0  
20. BL 0 21. Roof 0 22. Other 0

(0) No glazing damage from impact forces  
(2) Glazing in place and cracked from impact forces  
(3) Glazing in place and holed from impact forces  
(4) Glazing out-of-place (cracked or not) and not holed from impact forces  
(5) Glazing out-of-place and holed from impact forces  
(6) Glazing disintegrated from impact forces  
(7) Glazing removed prior to accident  
(8) No glazing  
(9) Unknown if damaged

### Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0  
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing  
(1) Glazing contacted by occupant but no glazing damage  
(2) Glazing in place and cracked by occupant contact  
(3) Glazing in place and holed by occupant contact  
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact  
(5) Glazing out-of-place by occupant contact and holed by occupant contact  
(6) Glazing disintegrated by occupant contact  
(9) Unknown if contacted by occupant

If No Glazing Damage And No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

### Type of Window/Windshield Glazing

31. WS 0 32. LF 0 33. RF 0 34. LR 0 35. RR 0  
36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing  
(1) AS-1 — Laminated  
(2) AS-2 — Tempered  
(3) AS-3 — Tempered-tinted  
(4) AS-14 — Glass/Plastic  
(8) Other (specify):  
  
(9) Unknown

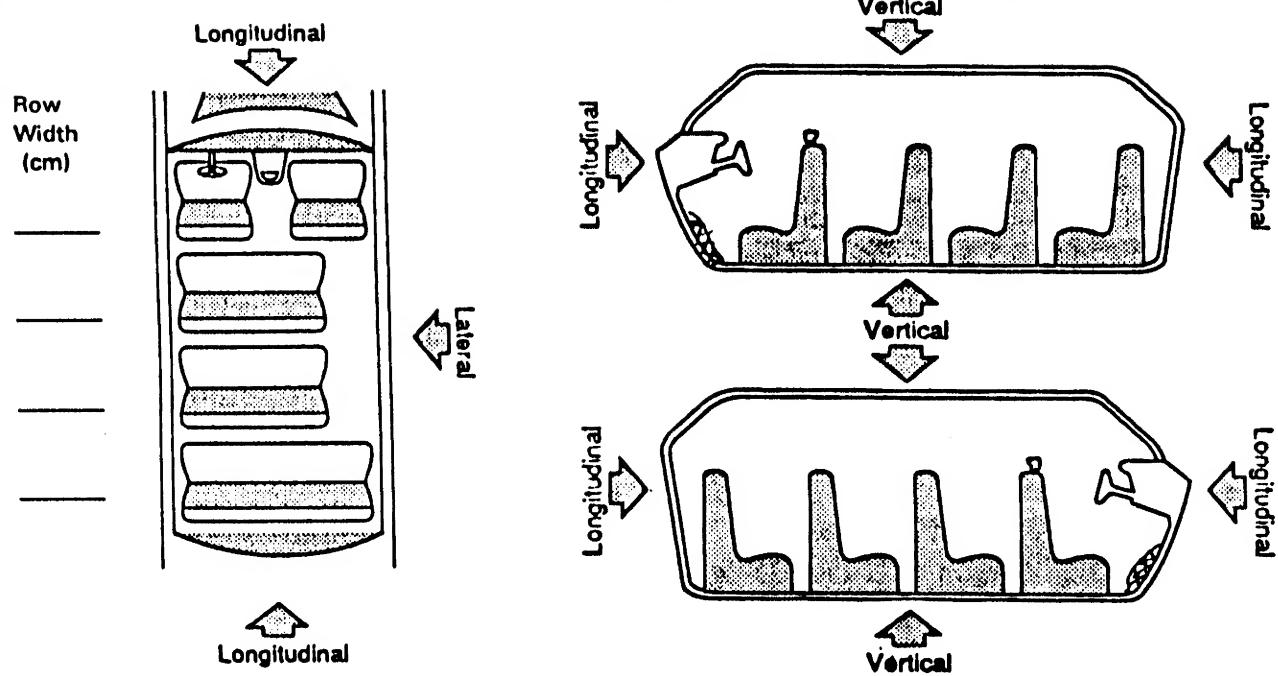
### Window Precrash Glazing Status

39. WS 0 40. LF 0 41. RF 0 42. LR 0 43. RR 0  
44. BL 0 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing  
(1) Fixed  
(2) Closed  
(3) Partially opened  
(4) Fully opened  
(9) Unknown

## INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are in Centimeters)			DOMINANT CRUSH DIRECTION	
		COMPARISON VALUE	-	INTRUDED VALUE	=	
11	TOE PAN	114.3 (45.4")	-	102.9 (44.5")	= 11.4 (4.5")	LONG.
13	TOE PAN	114.3 (45.4")	-	106.7 (42.0")	= 7.6 (3.0")	LONG.
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	
			-		=	

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Crush Direction	Dominant
1st	47. <u>1</u>	48. <u>4</u> <u>5</u>	49. <u>2</u>	50. <u>2</u>	
2nd	51. <u>1</u> <u>3</u>	52. <u>6</u> <u>5</u>	53. <u>1</u>	54. <u>2</u>	
3rd	55. _____	56. _____	57. _____	58. _____	
4th	59. _____	60. _____	61. _____	62. _____	
5th	63. _____	64. _____	65. _____	66. _____	
6th	67. _____	68. _____	69. _____	70. _____	
7th	71. _____	72. _____	73. _____	74. _____	
8th	75. _____	76. _____	77. _____	78. _____	
9th	79. _____	80. _____	81. _____	82. _____	
10th	83. _____	84. _____	85. _____	86. _____	

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

(97) Catastrophic  
 (98) Other enclosed  
area (specify)

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

(99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
	-		-	
	-		-	
o	-	o	-	o
	-		-	
	-		-	

**STEERING COLUMN****87. Steering Column Type**

(1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify):

2

(9) Unknown

**88. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X**89. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**90. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**91. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**92. Steering Rim/Spoke Deformation**

Code actual measured

deformation to the nearest centimeter

(00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

Ø Ø**93. Location of Steering Rim/Spoke**

Deformation

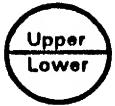
(00) No steering rim deformation

**Quarter Sections**

(01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

Ø Ø**Half Sections**

(05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



(09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

**INSTRUMENT PANEL****94. Odometer Reading**Ø 3 9,000kilometers—Code to the  
 nearest 1,000 kilometers

(000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

Ø 2 4 3 3 Ø miles x 1.6093 = Ø 3 9.1 5 4 kilometersSource: INSPECTION**95. Instrument Panel Damage from  
 Occupant Contact?**1

(0) No  
 (1) Yes  
 (9) Unknown

**96. Knee Bolsters Deformed from  
 Occupant Contact?**8

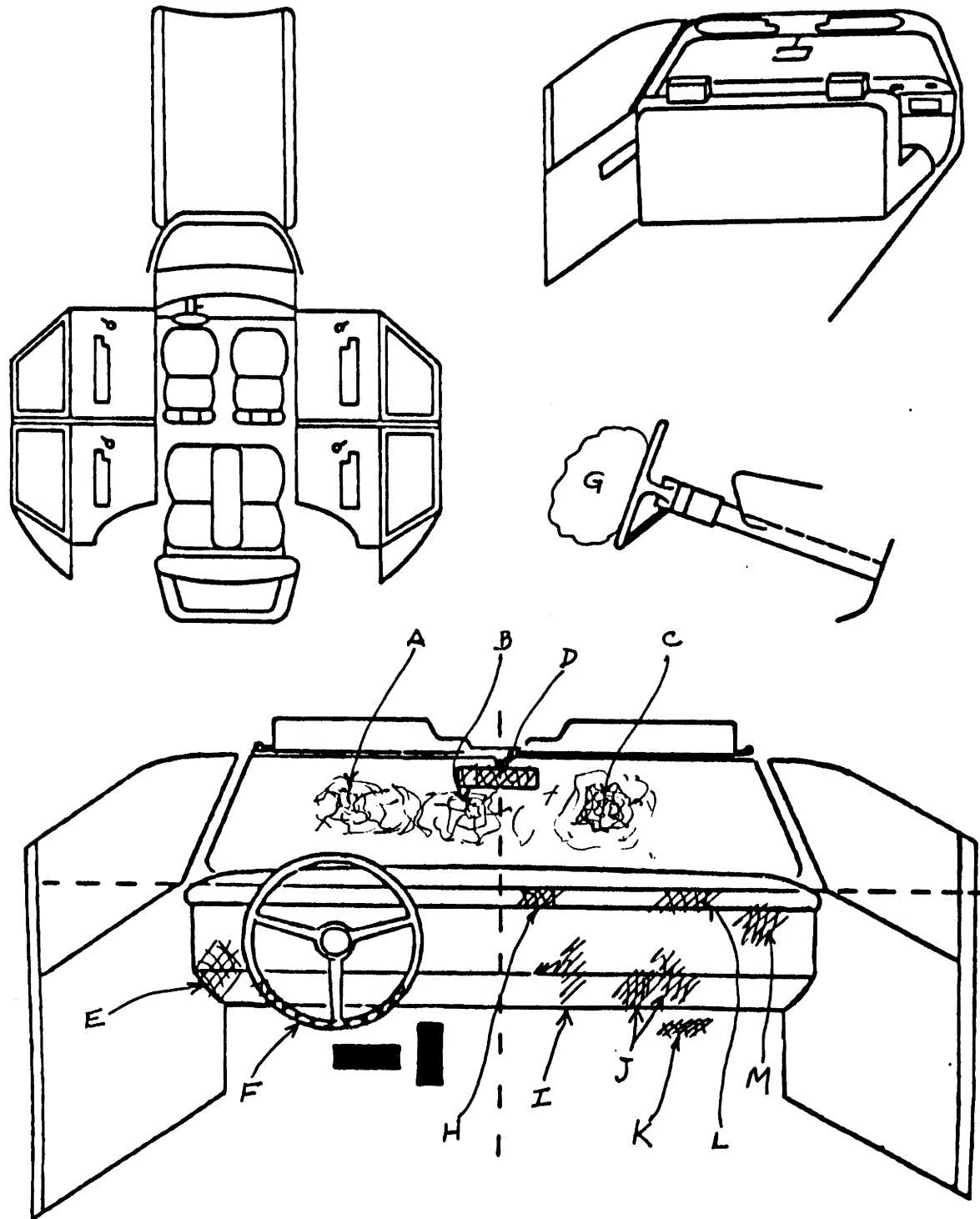
(0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

**97. Did Glove Compartment Door Open  
 During Collision(s)?**Ø

(0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	Ø1	Ø1	R. HAND	SPIDER WEB	1
B	Ø1	Ø2	HEAD	SPIDERWEB/HAIR/SKIN/OIL	1
C	Ø1	Ø2	R. HAND	SPIDER WEB/Body oil	1
D	Ø2	Ø2	HEAD	OUT OF POSITION/HAIR/BLOOD	1
E	Ø9	Ø1	L. KNEE	DEFORMED/ABRADED	1
F	Ø4	Ø1	UPPER R. LEG	ABRADED	1
G	45	Ø1	TORSO	BAG DEPLOYED	1
H	1Ø	Ø2	HEAD	ABRADED/BLOOD/GORE	1
I	1Ø	Ø2	L. LEG	ABRADED/BLOOD/GORE	1
J	12	Ø2	TORSO	ABRADED/BLOOD/GORE	1
K	11	Ø2	R & L FEET	DEFORMED/BROKEN	1
L	11	Ø2	TORSO	ABRADED/BLOOD	1
M	11	Ø2	R. HAND	ABRADED/BLOOD	1
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

(01) Windshield  
 (02) Mirror  
 (03) Sunvisor  
 (04) Steering wheel rim  
 (05) Steering wheel hub/spoke  
 (06) Steering wheel (combination of codes 04 and 05)  
 (07) Steering column, transmission selector lever, other attachment  
 (08) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (09) Left instrument panel and below  
 (10) Center instrument panel and below  
 (11) Right instrument panel and below  
 (12) Glove compartment door  
 (13) Knee bolster  
 (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (16) Driver side air bag compartment cover  
 (17) Passenger side air bag compartment cover  
 (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_  
 (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests  
 (21) Left side hardware or armrest  
 (22) Left A (A1/A2)-pillar

(23) Left B-pillar

(24) Other left pillar (specify):

(25) Left side window glass or frame

(26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

(27) Other left side object (specify):

(28) Left side window sill

## RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests

(31) Right side hardware or armrest

(32) Right A (A1/A2)-pillar

(33) Right B-pillar

(34) Other right pillar (specify):

(35) Right side window glass or frame

(36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

(37) Other right side object (specify):

(38) Right side window sill

## INTERIOR

(40) Seat, back support  
 (41) Belt restraint webbing/buckle  
 (42) Belt restraint B-pillar attachment point  
 (43) Other restraint system component (specify): \_\_\_\_\_  
 (44) Head restraint system  
 (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

(46) Other occupants (specify):

(47) Interior loose objects

(48) Child safety seat (specify):

(49) Other interior object (specify):

## ROOF

(50) Front header

(51) Rear header

(52) Roof left side rail

(53) Roof right side rail

(54) Roof or convertible top

## FLOOR

(56) Floor (including toe pan)

(57) Floor or console mounted transmission lever, including console

(58) Parking brake handle

(59) Foot controls including parking brake

## REAR

(60) Backlight (rear window)

(61) Backlight storage rack, door, etc.

(62) Other rear object (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

(1) Certain

(2) Probable

(3) Possible

(9) Unknown

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F	Availability/Function	/	∅
I	Deployment	/	∅
R	Failure	/	∅

**Air Bag System Availability/Function**

- (0) Not equipped/not available
- (1) Air bag
  
- Non-functional*
- (2) Air bag disconnected (specify): \_\_\_\_\_
  
- (3) Air bag not reinstalled
- (9) Unknown

**Air Bag System Deployment**

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

**Did Air Bag System Fail?**

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
  
- (9) Unknown

### AUTOMATIC BELTS

		Left	Right
F	Availability/Function	∅	∅
I	Use	∅	∅
R	Type	∅	∅
S	Proper Use	∅	∅
T	Failure Modes	∅	∅

**Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

**Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

**Automatic (Passive) Belt System Type**

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

**Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

- (8) Other improper use of automatic belt system  
(specify): \_\_\_\_\_
- (9) Unknown

**Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
  
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_
  
- (9) Unknown

## MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F I R S T	Availability	4	Ø	4
	Use	ØØ	ØØ	ØØ
	Failure Modes	Ø	Ø	Ø
S E C O N D	Availability	4	3	4
	Use	Ø4	ØØ	Ø4
	Failure Modes	1	Ø	1
T H I R D	Availability			
	Use			
	Failure Modes			
O T H E R	Availability			
	Use			
	Failure Modes			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

## Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

## (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number							
1. Type of Child Safety Seat							
2. Child Safety Seat Orientation							
3. Child Safety Seat Harness Usage							
4. Child Safety Seat Shield Usage							
5. Child Safety Seat Tether Usage							
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat						

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):  

---
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):  

---
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):  

---
- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):  

---
- (29) Unknown orientation

(99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**

(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R S T	Head Restraint Type/Damage	3	φ	3
	Seat Type	φ 1	φ φ	φ 1
	Seat Performance	1	φ	5
	Seat Orientation	1	φ	1
S E C O N D	Head Restraint Type/Damage	φ	φ	φ
	Seat Type	φ 3	φ 3	φ 3
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_
- (9) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION**      No       Yes

Describe indications of ejection and body parts involved in partial ejection(s):

---



---



---



---

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection (1) Complete ejection (2) Partial ejection (3) Ejection, Unknown degree (9) Unknown	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify):  (9) Unknown	(5) Integral structure (8) Other medium (specify):  (9) Unknown
Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear	Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify):  _____	Medium Status (Immediately Prior to Impact) (1) Open (2) Closed (3) Integral structure (9) Unknown

**ENTRAPMENT**      No       Yes

Describe entrapment mechanism:

---



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---

Component(s):

---



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(Note in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum DS1-93-AB-006
3. Vehicle Number 0 1
4. Occupant Number 0 1

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 4 5  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 1  
(1) Male  
(2) Female  
(9) Unknown
7. Occupant's Height 1 7 8  
Code actual height to the nearest centimeter.  
(99) Unknown  
  
74 inches X 2.54 = 178 centimeters
8. Occupant's Weight 0 8 2  
Code actual weight to the nearest kilogram.  
(999) Unknown  
  
184 pounds X .4536 = 82 kilograms
9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 1 1  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant  
  
(97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown
11. Occupant's Posture 0  
(0) Normal posture  
  
*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

cb15. Medium Status (Immediately Prior To Impact) cb

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

cb

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

sf

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):  
\_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify):  
\_\_\_\_\_
- (9) Unknown

cb

## RESTRAINT SYSTEM EVALUATION

## 17. Manual (Active) Belt System Availability

4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

## (8) Other belt (specify):

(9) Unknown

## 18. Manual (Active) Belt System Use

Φ Φ

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

## (02) Shoulder belt

## (03) Lap belt

## (04) Lap and shoulder belt

## (05) Belt used—type unknown

## (08) Other belt used (specify):

## (12) Shoulder belt used with child safety seat

## (13) Lap belt used with child safety seat

## (14) Lap and shoulder belt used with child safety seat

## (15) Belt used with child safety seat—type unknown

## (18) Other belt used with child safety seat (specify):

## (99) Unknown if belt used

## 19. Proper Use of Manual (Active) Belts

Φ

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## 20. Manual (Active) Belt Failure Modes

*During Accident*

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## 21. Air Bag System Availability/Function

1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled

- (9) Unknown

## 22. Air Bag System Deployment

1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

## 23. Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (9) Unknown

**Note:** See Variables 44 through 48 (Page 5) for Information on Automatic Belts

## 24. Police Reported Restraint Use

Φ

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify):
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

26. Seat Type (this Occupant Position) φ 1

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
  
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>      φ      φ      φ</u></p> <p>(000) No child safety seat  Applicable codes are found in your NASS CDS  Data Collection, Coding and Editing  (950) Built-in child safety seat  (997) Other make/model (specify):    (998) Unknown make/model  (999) Unknown if child safety seat used</p>	<p>31. Child Safety Seat Harness Usage <u>      φ      φ</u></p> <p>32. Child Safety Seat Shield Usage <u>      φ      φ</u></p> <p>33. Child Safety Seat Tether Usage <u>      φ      φ</u></p> <p>Note: Options below applicable to  Variables OA31-OA33.</p> <p>(00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>      φ</u></p> <p>(0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):    (8) Unknown child safety seat type  (9) Unknown if child safety seat used</p>	<p><i>Not Designed With Harness/Shield/Tether</i>  (01) After market harness/shield/tether  added, not used  (02) After market harness/shield/tether used  (03) Child safety seat used, but no after market  harness/shield/tether added  (09) Unknown if harness/shield/tether  added or used</p> <p><i>Designed With Harness/Shield/Tether</i>  (11) Harness/shield/tether not used  (12) Harness/shield/tether used  (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>      φ      φ</u></p> <p>(00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i>  (01) Rear facing  (02) Forward facing  (08) Other orientation (specify):    (09) Unknown orientation</p> <p><i>Designed For Forward Facing for This Age/Weight</i>  (11) Rear facing  (12) Forward facing  (18) Other orientation (specify):    (19) Unknown orientation</p> <p><i>Unknown Design or Orientation For This  Age/Weight, or Unknown Age/Weight</i>  (21) Rear facing  (22) Forward facing  (28) Other orientation (specify):    (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i>  (21) Harness/shield/tether not used  (22) Harness/shield/tether used  (29) Unknown if harness/shield/tether used</p> <p>(99) Unknown if child safety seat used</p>

## National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 6

## INJURY CONSEQUENCES

## 34. Injury Severity (Police Rating)

(0) O - No injury  
 (1) C - Possible injury  
 (2) B - Nonincapacitating injury  
 (3) A - Incapacitating injury  
 (4) K - Killed  
 (5) U - Injury, severity unknown  
 (6) Died prior to accident  
 (9) Unknown

3

## 35. Treatment - Mortality

(0) No treatment  
 (1) Fatal  
 (2) Fatal - ruled disease (specify):

4*Nonfatal*

(3) Hospitalization  
 (4) Transported and released  
 (5) Treatment at scene - nontransported  
 (6) Treatment later  
 (8) Treatment - other (specify):

(9) Unknown

## 36. Type Of Medical Facility (for Initial Treatment)

2

(0) Not treated at a medical facility  
 (1) Trauma center  
 (2) Hospital  
 (3) Medical clinic  
 (4) Physician's office  
 (5) Treatment later at medical facility  
 (8) Other (specify):

(9) Unknown

## 37. Hospital Stay

Ø Ø

(00) Not Hospitalized  
 \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.  
 (61) 61 days or more  
 (99) Unknown

## 99. Case Occupant

1

(0) Not the Case Occupant  
 (1) This is the Case Occupant  
 (2) This is the Case Occupant in another case.

## 38. Working Days Lost

6 1

\_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident  
 (00) No working days lost  
 (61) 61 days or more  
 (62) Fatally injured  
 (97) Not working prior to accident  
 (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE  
COMPLETED BY THE ZONE CENTER

## 39. Time to Death

Ø Ø

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

## 40. 1st Medically Reported Cause of Death

Ø Ø

## 41. 2nd Medically Reported Cause of Death

Ø Ø

## 42. 3rd Medically Reported Cause of Death

Ø Ø

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown43. Number of Recorded Injuries for  
This OccupantØ 3

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

## National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

Page 7

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/ Function**

(0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

(4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use**

(0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type**

(0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive Belt System**

(0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

(3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes***During Accident*

(0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)**

(0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score**

(at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?**

(1) No - blood not given  
 (2) Yes - blood given  
 (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>**

(00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO  YES 

UPDATE CANDIDATE?

NO  YES



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	2. Case Number - Stratum	3. Vehicle Number	4. Occupant Number
	DSI-93-AB-006		

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Date	O.I.C.-A.I.S.						Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	ICD-9	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
1st	5. 1	6. 8	7. 5	8. 24	9. 00	10. 2	11. 1	12. 09	13. 1	14. 1	15. 00	822.0
2nd	16. 1	17. 1	18. 2	19. 04	20. 02	21. 1	22. 2	23. 04	24. 1	25. 1	26. 00	913.0
3rd	27. 1	28. 4	29. 9	30. 04	31. 02	32. 1	33. 4	34. 04	35. 1	36. 1	37. 00	922.1
4th	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.	
5th	49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.	
6th	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.	
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.	
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.	

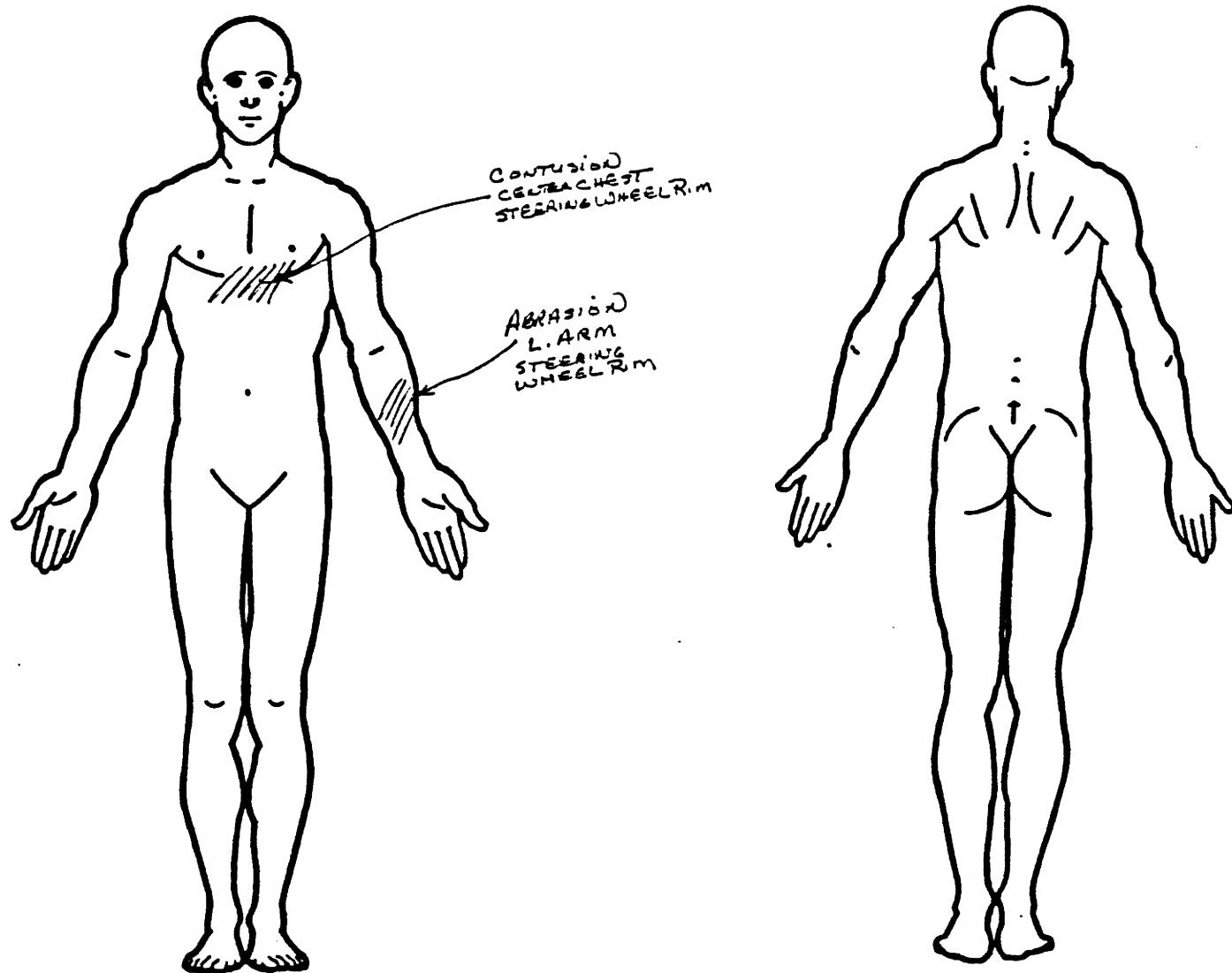
## OCCUPANT INJURY DATA

Source of Injury Date	O.I.C.-A.I.S						Injury Source	Injury Confidence Level	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect			
11th	—	—	—	—	—	—	—	—	—
12th	—	—	—	—	—	—	—	—	—
13th	—	—	—	—	—	—	—	—	—
14th	—	—	—	—	—	—	—	—	—
15th	—	—	—	—	—	—	—	—	—
16th	—	—	—	—	—	—	—	—	—
17th	—	—	—	—	—	—	—	—	—
18th	—	—	—	—	—	—	—	—	—
19th	—	—	—	—	—	—	—	—	—
20th	—	—	—	—	—	—	—	—	—
21st	—	—	—	—	—	—	—	—	—
22nd	—	—	—	—	—	—	—	—	—
23rd	—	—	—	—	—	—	—	—	—
24th	—	—	—	—	—	—	—	—	—
25th	—	—	—	—	—	—	—	—	—
26th	—	—	—	—	—	—	—	—	—

ICD-9

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



<b>SOURCE OF INJURY DATA</b> <b>OFFICIAL</b> <ul style="list-style-type: none"> <li>(1) Autopsy records with or without hospital/medical records</li> <li>(2) Hospital/medical records other than emergency room (e.g., discharge summary)</li> <li>(3) Emergency room records only (including associated X-rays or other lab reports)</li> <li>(4) Private physician, walk-in or emergency clinic</li> </ul> <b>UNOFFICIAL</b> <ul style="list-style-type: none"> <li>(5) Lay coroner report</li> <li>(6) E.M.S. personnel</li> <li>(7) Interviewee</li> <li>(8) Other source (specify): _____</li> <li>(9) Police</li> </ul>		<p>(26) Left side window glass or frame  (28) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  (27) Other left side object (specify): _____</p> <p>(28) Left side window sill</p> <p><b>RIGHT SIDE</b></p> <p>(30) Right side interior surface, excluding hardware or armrests  (31) Right side hardware or armrest  (32) Right A (A1/A2)-pillar  (33) Right B-pillar  (34) Other right pillar (specify): _____</p> <p>(35) Right side window glass or frame  (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  (37) Other right side object (specify): _____</p> <p>(38) Right side window sill</p> <p><b>INTERIOR</b></p> <p>(40) Seat, back support  (41) Belt restraint webbing/buckle  (42) Belt restraint B-pillar or door frame attachment point  (43) Other restraint system component (specify): _____  (44) Head restraint system  (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  (46) Other occupant (specify): _____</p> <p>(47) Interior loose objects  (48) Child safety seat (specify): _____</p> <p>(49) Other interior object (specify): _____</p> <p><b>ROOF</b></p> <p>(50) Front header  (51) Rear header  (52) Roof left side rail  (53) Roof right side rail  (54) Roof or convertible top</p> <p><b>FLOOR</b></p> <p>(56) Floor (including toe pan)  (57) Floor or console mounted transmission lever, including console  (58) Parking brake handle  (59) Foot controls including parking brake</p> <p><b>REAR</b></p> <p>(60) Backlight (rear window)</p> <p>(61) Backlight storage rack, door, etc.  (62) Other rear object (specify): _____</p> <p><b>EXTERIOR OF OCCUPANT'S VEHICLE</b></p> <p>(66) Hood  (68) Outside hardware (e.g., outside mirror, antenna)  (67) Other exterior surface or tire (specify): _____  (69) Unknown exterior objects</p> <p><b>EXTERIOR OF OTHER MOTOR VEHICLE</b></p> <p>(70) Front bumper  (71) Hood edge  (72) Other front of vehicle (specify): _____</p> <p>(73) Hood  (74) Hood ornament  (75) Windshield, roof rail, A-pillar  (76) Side surface  (77) Side mirror  (78) Other side protrusions (specify): _____</p> <p>(79) Rear surface  (80) Undercarriage  (81) Tires and wheels  (82) Other exterior of other motor vehicle (specify): _____</p> <p>(83) Unknown exterior of other motor vehicle</p> <p><b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b></p> <p>(84) Ground  (85) Other vehicle or object (specify): _____</p> <p>(86) Unknown vehicle or object</p> <p><b>NONCONTACT INJURY</b></p> <p>(90) Fire in vehicle  (91) Flying glass  (92) Other noncontact injury source (specify): _____</p> <p>(93) Air bag exhaust gases  (97) Injured, unknown source</p> <p><b>INJURY SOURCE CONFIDENCE LEVEL</b></p> <p>(1) Certain  (2) Probable  (3) Possible  (4) Unknown</p> <p><b>DIRECT/INDIRECT INJURY</b></p> <p>(1) Direct contact injury  (2) Indirect contact injury  (3) Noncontact injury  (7) Injured, unknown source</p>												
<p><b>INJURY SOURCE</b></p> <p><b>FRONT</b></p> <p>(1) Windshield  (2) Mirror  (3) Sunvisor  (4) Steering wheel rim  (5) Steering wheel hub/spoke  (6) Steering wheel (combination of codes 04 and 05)  (7) Steering column, transmission selector lever, other attachment  (8) Add on equipment (e.g., CB, tape deck, air conditioner)  (9) Left instrument panel and below  (10) Center instrument panel and below  (11) Right instrument panel and below  (12) Glove compartment door  (13) Knee bolster  (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  (16) Driver side air bag compartment cover  (17) Passenger side air bag compartment cover  (18) Windshield reinforced by exterior object (specify): _____  (19) Other front object (specify): _____</p> <p><b>LEFT SIDE</b></p> <p>(20) Left side interior surface, excluding hardware or armrests  (21) Left side hardware or armrest  (22) Left A (A1/A2)-pillar  (23) Left B-pillar  (24) Other left pillar (specify): _____</p> <p><b>RIGHT SIDE</b></p> <p>(26) Left side window glass or frame including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  (27) Other left side object (specify): _____</p> <p>(28) Left side window sill</p> <p><b>INTERIOR</b></p> <p>(40) Seat, back support  (41) Belt restraint webbing/buckle  (42) Belt restraint B-pillar or door frame attachment point  (43) Other restraint system component (specify): _____  (44) Head restraint system  (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  (46) Other occupant (specify): _____</p> <p>(47) Interior loose objects  (48) Child safety seat (specify): _____</p> <p>(49) Other interior object (specify): _____</p> <p><b>ROOF</b></p> <p>(50) Front header  (51) Rear header  (52) Roof left side rail  (53) Roof right side rail  (54) Roof or convertible top</p> <p><b>FLOOR</b></p> <p>(56) Floor (including toe pan)  (57) Floor or console mounted transmission lever, including console  (58) Parking brake handle  (59) Foot controls including parking brake</p> <p><b>REAR</b></p> <p>(60) Backlight (rear window)</p> <p><b>INJURY SOURCE CONFIDENCE LEVEL</b></p> <p>(1) Certain  (2) Probable  (3) Possible  (4) Unknown</p> <p><b>DIRECT/INDIRECT INJURY</b></p> <p>(1) Direct contact injury  (2) Indirect contact injury  (3) Noncontact injury  (7) Injured, unknown source</p>														
<p><b>OCCUPANT INJURY CLASSIFICATION</b></p> <table border="1"> <thead> <tr> <th>Body Region</th> <th>Specific Anatomic Structure</th> <th>Spine</th> <th>Abbreviated Injury Scale</th> </tr> </thead> <tbody> <tr> <td>(1) Head  (2) Face  (3) Neck  (4) Thorax  (5) Abdomen  (6) Spine  (7) Upper Extremity  (8) Lower Extremity  (9) Unspecified</td> <td>(02) Whole Area  (02) Skin - Abrasion  (04) Skin - Contusion  (06) Skin - Laceration  (08) Skin - Avulsion  (10) Amputation  (20) Burn  (30) Crush  (40) Degloving  (50) Injury - NFS  (90) Trauma, other than mechanical</td> <td>(02) Cervical  (04) Thoracic  (06) Lumbar  <b>Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02</b></td> <td>(1) Minor Injury  (2) Moderate Injury  (3) Serious Injury  (4) Severe Injury  (5) Critical Injury  (6) Maximum (untreatable)  (7) Injured, unknown severity</td> </tr> <tr> <td colspan="2"> <b>Type of Anatomic Structure</b> <ul style="list-style-type: none"> <li>(1) Whole Area</li> <li>(2) Vessels</li> <li>(3) Nerves</li> <li>(4) Organs (includes muscles/ligaments)</li> <li>(5) Skeletal (includes joints)</li> <li>(6) Head - LOC</li> <li>(8) Skin</li> </ul> </td> <td> <b>Level of Injury</b>  <p>Specific injuries are assigned consecutive two-digit numbers beginning with 02.</p> <p>Head - LOC</p> <p>(02) Length of LOC  (04, 06, 08) Level of Consciousness  (10) Concussion</p> <p>To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.</p> </td> <td> <b>Aspect</b>  <p>(1) Right  (2) Left  (3) Bilateral  (4) Central  (6) Posterior  (7) Superior  (8) Inferior  (9) Unknown  (0) Whole region</p> </td> </tr> </tbody> </table>			Body Region	Specific Anatomic Structure	Spine	Abbreviated Injury Scale	(1) Head (2) Face (3) Neck (4) Thorax (5) Abdomen (6) Spine (7) Upper Extremity (8) Lower Extremity (9) Unspecified	(02) Whole Area (02) Skin - Abrasion (04) Skin - Contusion (06) Skin - Laceration (08) Skin - Avulsion (10) Amputation (20) Burn (30) Crush (40) Degloving (50) Injury - NFS (90) Trauma, other than mechanical	(02) Cervical (04) Thoracic (06) Lumbar <b>Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02</b>	(1) Minor Injury (2) Moderate Injury (3) Serious Injury (4) Severe Injury (5) Critical Injury (6) Maximum (untreatable) (7) Injured, unknown severity	<b>Type of Anatomic Structure</b> <ul style="list-style-type: none"> <li>(1) Whole Area</li> <li>(2) Vessels</li> <li>(3) Nerves</li> <li>(4) Organs (includes muscles/ligaments)</li> <li>(5) Skeletal (includes joints)</li> <li>(6) Head - LOC</li> <li>(8) Skin</li> </ul>		<b>Level of Injury</b> <p>Specific injuries are assigned consecutive two-digit numbers beginning with 02.</p> <p>Head - LOC</p> <p>(02) Length of LOC  (04, 06, 08) Level of Consciousness  (10) Concussion</p> <p>To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.</p>	<b>Aspect</b> <p>(1) Right  (2) Left  (3) Bilateral  (4) Central  (6) Posterior  (7) Superior  (8) Inferior  (9) Unknown  (0) Whole region</p>
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<b>Type of Anatomic Structure</b> <ul style="list-style-type: none"> <li>(1) Whole Area</li> <li>(2) Vessels</li> <li>(3) Nerves</li> <li>(4) Organs (includes muscles/ligaments)</li> <li>(5) Skeletal (includes joints)</li> <li>(6) Head - LOC</li> <li>(8) Skin</li> </ul>		<b>Level of Injury</b> <p>Specific injuries are assigned consecutive two-digit numbers beginning with 02.</p> <p>Head - LOC</p> <p>(02) Length of LOC  (04, 06, 08) Level of Consciousness  (10) Concussion</p> <p>To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.</p>	<b>Aspect</b> <p>(1) Right  (2) Left  (3) Bilateral  (4) Central  (6) Posterior  (7) Superior  (8) Inferior  (9) Unknown  (0) Whole region</p>											

# OFFICIAL INJURY DATA – SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS = 99

Units of Blood Given

Units = 0

Arterial Blood Gases

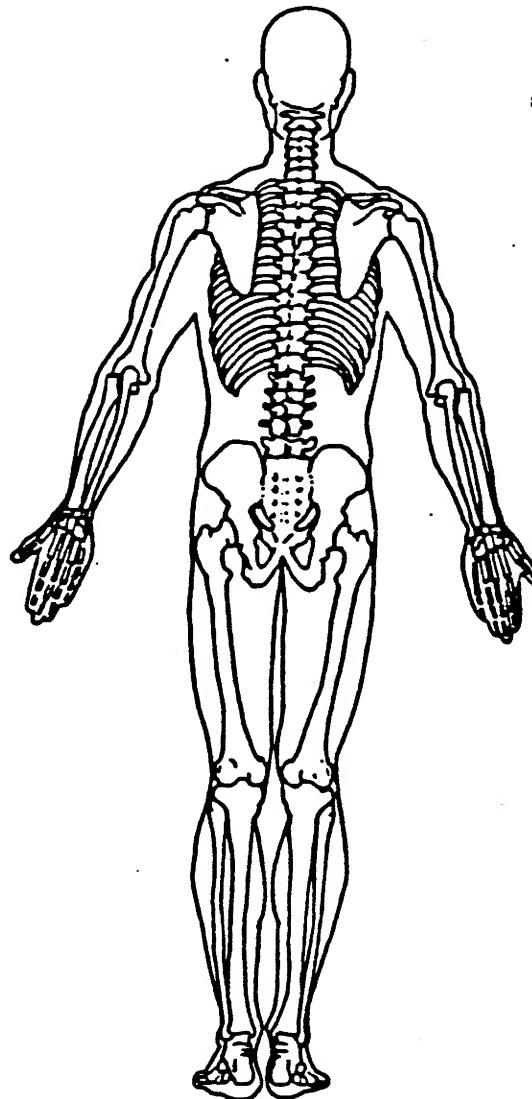
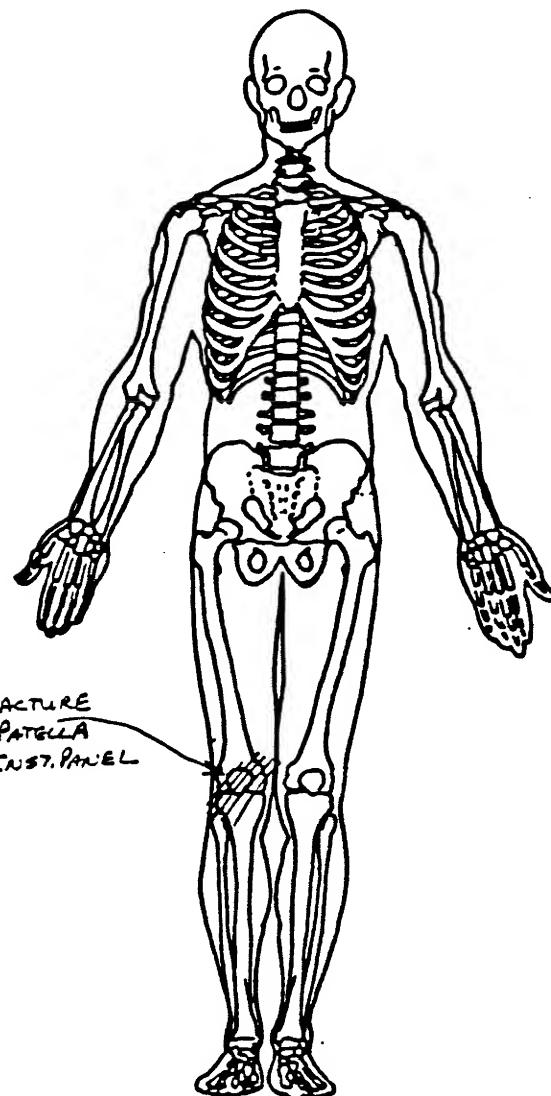
pH = 7.4

PO<sub>2</sub> = 95

PCO<sub>2</sub> = 35

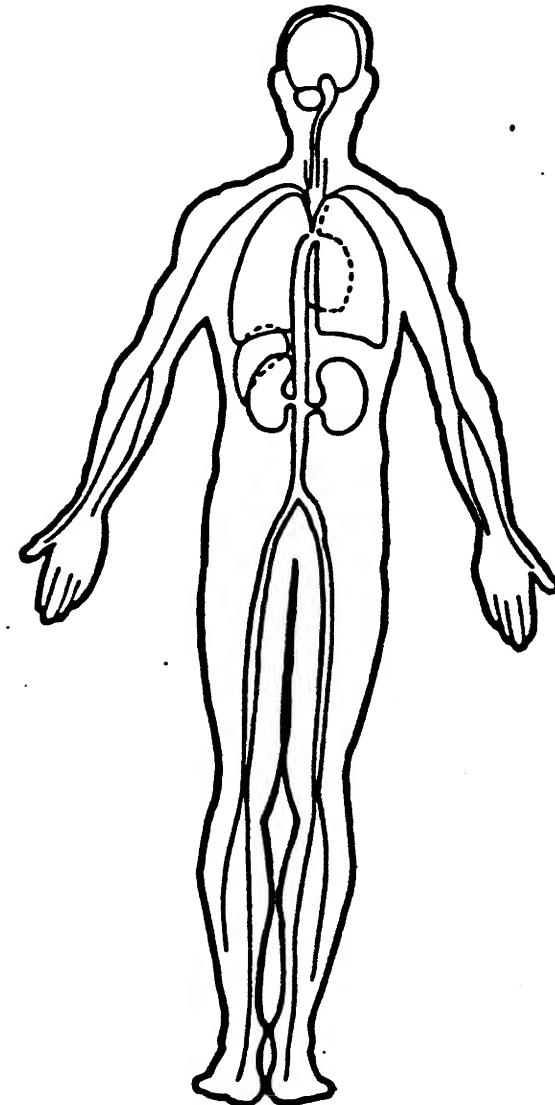
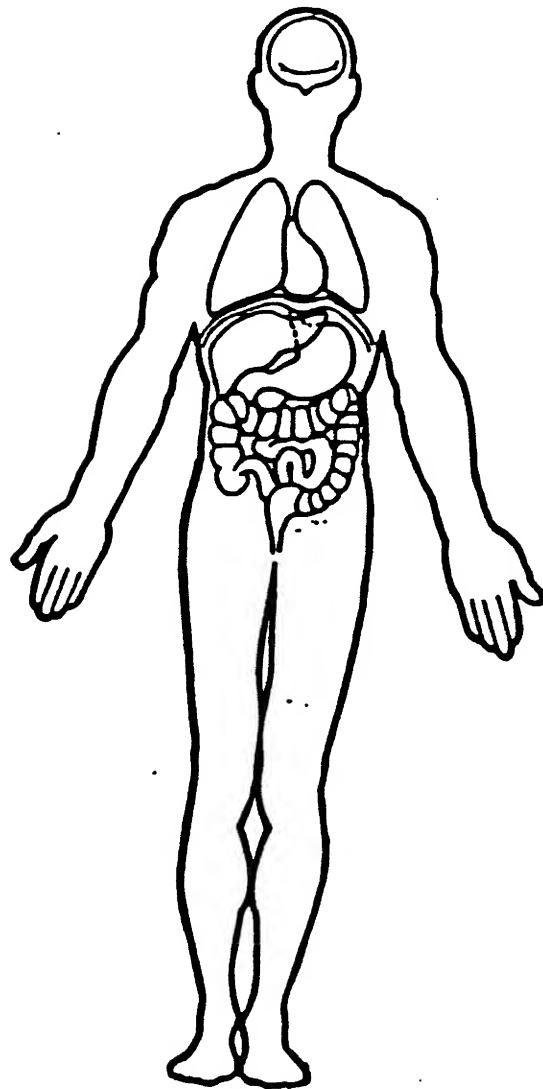
HCO<sub>3</sub> = 24

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA - INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum DSI-93-AB-ΦΦ6
3. Vehicle Number Φ 1
4. Occupant Number Φ 2

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 3 Φ  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown

6. Occupant's Sex 2  
(1) Male  
(2) Female  
(9) Unknown

7. Occupant's Height 1 6 Φ  
Code actual height to the nearest centimeter.  
(99) Unknown

63 inches X .254 = 1 6 Φ centimeters

8. Occupant's Weight 1 Φ 2  
Code actual weight to the nearest kilogram.  
(999) Unknown

$$225 \text{ pounds} \times .4536 = 1 \Phi 2 \text{ kilograms}$$

9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 1 3  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify): \_\_\_\_\_  
(15) On or in the lap of another occupant
  
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify): \_\_\_\_\_  
(25) On or in the lap of another occupant
  
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify): \_\_\_\_\_  
(35) On or in the lap of another occupant
  
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify): \_\_\_\_\_  
(45) On or in the lap of another occupant
  
- (97) In or on unenclosed area  
(98) Other seat (specify): \_\_\_\_\_  
(99) Unknown

11. Occupant's Posture Φ  
(0) Normal posture
  
- Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify): \_\_\_\_\_  
(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

## 15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

0

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):  
\_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify):  
\_\_\_\_\_
- (9) Unknown

0

## RESTRAINT SYSTEM EVALUATION

## 17. Manual (Active) Belt System Availability

4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

- (8) Other belt (specify): \_\_\_\_\_

- (9) Unknown

## 18. Manual (Active) Belt System Use

cb cb

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt

- (03) Lap belt

- (04) Lap and shoulder belt

- (05) Belt used—type unknown

- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat

- (13) Lap belt used with child safety seat

- (14) Lap and shoulder belt used with child safety seat

- (15) Belt used with child safety seat—type unknown

- (18) Other belt used with child safety seat (specify): \_\_\_\_\_

- (99) Unknown if belt used

## 19. Proper Use of Manual (Active) Belts

φ

- (0) None used or not available

- (1) Belt used properly

- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm

- (4) Shoulder belt worn behind back or seat

- (5) Belt worn around more than one person

- (6) Lap belt worn on abdomen

- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

- (8) Other improper use of manual belt system (specify): \_\_\_\_\_

- (9) Unknown

## 20. Manual (Active) Belt Failure Modes

φ

*During Accident*

- (0) No manual belt used

- (1) No manual belt failure(s)

- (2) Torn webbing (stretched webbing not included)

- (3) Broken buckle or latchplate

- (4) Upper anchorage separated

- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor

- (7) Combination of above (specify): \_\_\_\_\_

- (8) Other manual belt failure (specify): \_\_\_\_\_

- (9) Unknown

## 21. Air Bag System Availability/Function

φ

- (0) Not equipped/not available

- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled

- (9) Unknown

## 22. Air Bag System Deployment

φ

- (0) Not equipped/not available

- (1) Air bag deployed during accident (as a result of impact)

- (2) Air bag deployed inadvertently just prior to accident

- (3) Air bag deployed, accident sequence undetermined

- (4) Nondeployed

- (5) Unknown if deployed

- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

- (9) Unknown

## 23. Are There Indications of Air Bag System Failure?

φ

- (0) Not equipped/not available

- (1) No

- (2) Yes (specify): \_\_\_\_\_

- (9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

## 24. Police Reported Restraint Use

φ

- (0) None used

- (1) Police did not indicate restraint use

- (2) Shoulder belt

- (3) Lap belt

- (4) Lap and shoulder belt

- (5) Belt used, type not specified

- (6) Child safety seat

- (7) Other or automatic restraint (specify): \_\_\_\_\_

- (8) Restrained, type unknown

- (9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

## 25. Head Restraint Type/Damage by Occupant at This Occupant Position

3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

## 26. Seat Type (this Occupant Position)

0 1

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

5

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>      ∅      ∅      ∅      </u></p> <p>(000) No child safety seat  Applicable codes are found in your NASS CDS  Data Collection, Coding and Editing  (950) Built-in child safety seat  (997) Other make/model (specify):    (998) Unknown make/model  (999) Unknown if child safety seat used</p>	<p>31. Child Safety Seat Harness Usage <u>      ∅      ∅      </u></p> <p>32. Child Safety Seat Shield Usage <u>      ∅      ∅      </u></p> <p>33. Child Safety Seat Tether Usage <u>      ∅      ∅      </u></p> <p>Note: Options below applicable to  Variables OA31-OA33.</p> <p>(00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>      ∅      </u></p> <p>(0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):    (8) Unknown child safety seat type  (9) Unknown if child safety seat used</p>	<p><i>Not Designed With Harness/Shield/Tether</i></p> <p>(01) After market harness/shield/tether added, not used  (02) After market harness/shield/tether used  (03) Child safety seat used, but no after market harness/shield/tether added  (09) Unknown if harness/shield/tether added or used</p> <p><i>Designed With Harness/Shield/Tether</i></p> <p>(11) Harness/shield/tether not used  (12) Harness/shield/tether used  (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>      ∅      ∅      </u></p> <p>(00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i></p> <p>(01) Rear facing  (02) Forward facing  (08) Other orientation (specify):    (09) Unknown orientation</p> <p><i>Designed For Forward Facing for This Age/Weight</i></p> <p>(11) Rear facing  (12) Forward facing  (18) Other orientation (specify):    (19) Unknown orientation</p> <p><i>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight</i></p> <p>(21) Rear facing  (22) Forward facing  (28) Other orientation (specify):    (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i></p> <p>(21) Harness/shield/tether not used  (22) Harness/shield/tether used  (29) Unknown if harness/shield/tether used</p> <p>(99) Unknown if child safety seat used</p>

**INJURY CONSEQUENCES****34. Injury Severity (Police Rating)**

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

3**35. Treatment - Mortality**

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

3*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_

- (9) Unknown

**36. Type Of Medical Facility (for Initial Treatment)**1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

- (9) Unknown

**37. Hospital Stay**phi 7

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

**99. Case Occupant**phi

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**38. Working Days Lost**6 1

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER****39. Time to Death**phi phi

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

**40. 1st Medically Reported Cause of Death**phi phi**41. 2nd Medically Reported Cause of Death**phi phi**42. 3rd Medically Reported Cause of Death**phi phi

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

- (99) Unknown

**43. Number of Recorded Injuries for This Occupant**phi 5

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**

44. Automatic (Passive) Belt System Availability/ φ  
 Function  
 (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

(4) Automatic belts destroyed or rendered  
 inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use φ  
 (0) Not equipped/not available/destroyed or  
 rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually  
 disconnected, motorized track inoperative)  
 (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type φ  
 (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. Proper Use of Automatic (Passive  
 Belt System) φ  
 (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with  
 child safety seat

*Automatic Belt Used Improperly*

(3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than  
 one person  
 (6) Lap portion of automatic belt worn  
 on abdomen  
 (7) Automatic lap and shoulder belt or  
 automatic shoulder belt used improperly  
 with child safety seat (specify):  
 (8) Other improper use of automatic belt system  
 (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes** φ

During Accident  
 (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)** 1

(0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE  
 COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 15  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the  
 initial GCS Score recorded at medical  
 facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

51. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units):  
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> φ 1  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED  
 WITH INITIAL SUBMISSION?

NO  YES

UPDATE CANDIDATE?

NO  YES



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Date	O.I.C.-A.I.S						Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	ICD-9		
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
1st	5. <u>2</u>	6. <u>8</u>	7. <u>5</u>	8. <u>18</u>	9. <u>14</u>	10. <u>3</u>	11. <u>1</u>	12. <u>11</u>	13. <u>1</u>	14. <u>1</u>	15. <u>ΦΦ</u>	821.41
2nd	16. <u>2</u>	17. <u>1</u>	18. <u>6</u>	19. <u>Φ2</u>	20. <u>Φ2</u>	21. <u>2</u>	22. <u>Φ</u>	23. <u>15</u>	24. <u>1</u>	25. <u>1</u>	26. <u>ΦΦ</u>	85Φ.1
3rd	27. <u>2</u>	28. <u>8</u>	29. <u>5</u>	30. <u>34</u>	31. <u>2Φ</u>	32. <u>2</u>	33. <u>1</u>	34. <u>11</u>	35. <u>1</u>	36. <u>1</u>	37. <u>ΦΦ</u>	823.22
4th	38. <u>2</u>	39. <u>8</u>	40. <u>5</u>	41. <u>16</u>	42. <u>Φ6</u>	43. <u>2</u>	44. <u>1</u>	45. <u>11</u>	46. <u>1</u>	47. <u>1</u>	48. <u>ΦΦ</u>	823.22
5th	49. <u>2</u>	50. <u>2</u>	51. <u>9</u>	52. <u>Φ6</u>	53. <u>Φ2</u>	54. <u>1</u>	55. <u>2</u>	56. <u>15</u>	57. <u>1</u>	58. <u>1</u>	59. <u>ΦΦ</u>	873.42
6th	60. <u>  </u>	61. <u>  </u>	62. <u>  </u>	63. <u>  </u>	64. <u>  </u>	65. <u>  </u>	66. <u>  </u>	67. <u>  </u>	68. <u>  </u>	69. <u>  </u>	70. <u>  </u>	
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>	
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>	
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>	
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>	

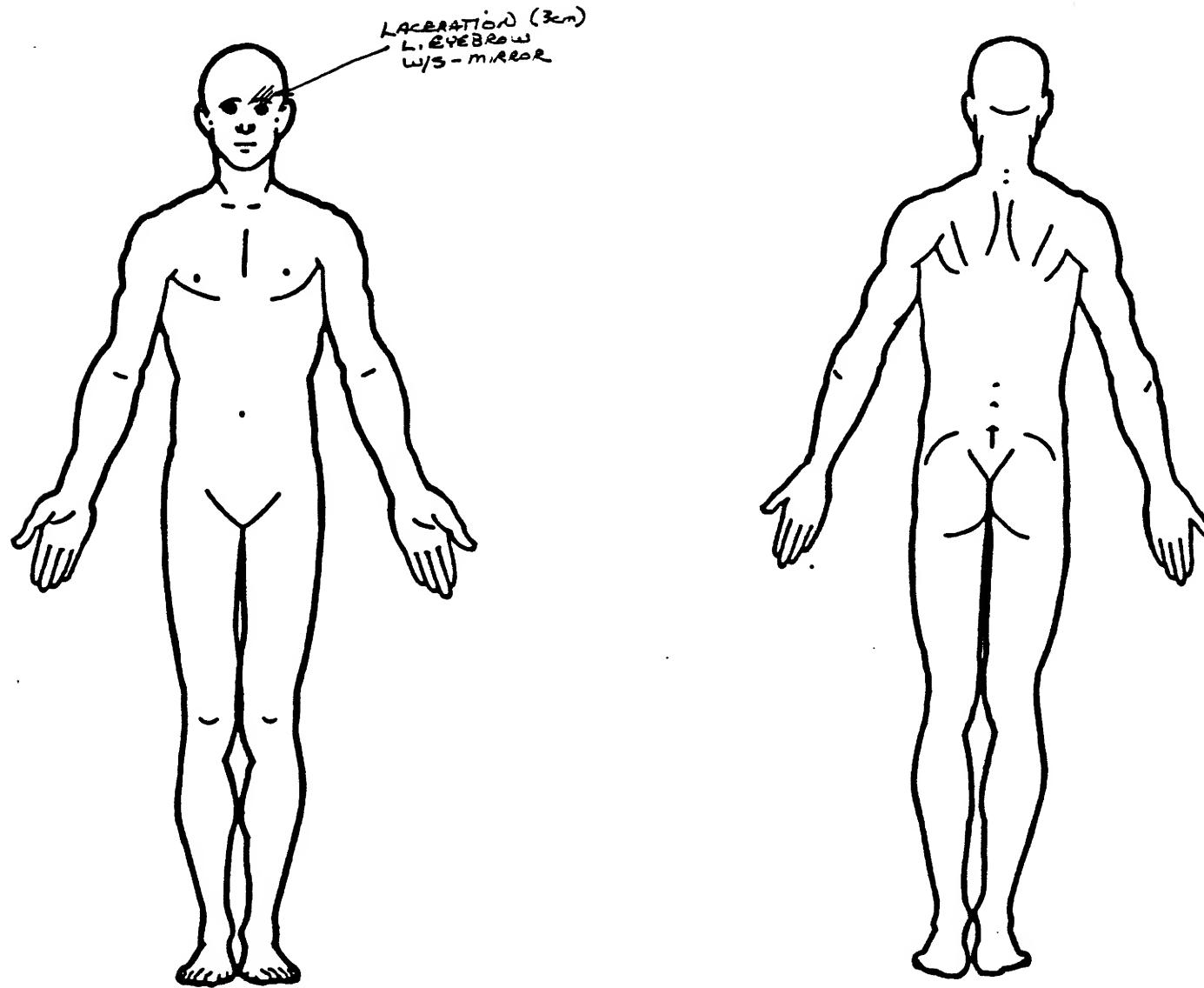
## OCCUPANT INJURY DATA

Source of Injury Date	O.I.C.-A.I.S						Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect			
11th	—	—	—	—	—	—	—	—	—
12th	—	—	—	—	—	—	—	—	—
13th	—	—	—	—	—	—	—	—	—
14th	—	—	—	—	—	—	—	—	—
15th	—	—	—	—	—	—	—	—	—
16th	—	—	—	—	—	—	—	—	—
17th	—	—	—	—	—	—	—	—	—
18th	—	—	—	—	—	—	—	—	—
19th	—	—	—	—	—	—	—	—	—
20th	—	—	—	—	—	—	—	—	—
21st	—	—	—	—	—	—	—	—	—
22nd	—	—	—	—	—	—	—	—	—
23rd	—	—	—	—	—	—	—	—	—
24th	—	—	—	—	—	—	—	—	—
25th	—	—	—	—	—	—	—	—	—
26th	—	—	—	—	—	—	—	—	—

ICD-9

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**SOURCE OF INJURY DATA****OFFICIAL**

(1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL**

(5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

**INJURY SOURCE****FRONT**

(01) Windshield  
 (02) Mirror  
 (03) Sunvisor  
 (04) Steering wheel rim  
 (05) Steering wheel hub/spoke  
 (06) Steering wheel (combination of codes 04 and 05)  
 (07) Steering column, transmission selector lever, other attachment  
 (08) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (09) Left instrument panel and below  
 (10) Center instrument panel and below  
 (11) Right instrument panel and below  
 (12) Glove compartment door  
 (13) Knee bolster  
 (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (16) Driver side air bag compartment cover  
 (17) Passenger side air bag compartment cover  
 (18) Windshield reinforced by exterior object (specify):  
 (19) Other front object (specify):

**LEFT SIDE**

(20) Left side interior surface, excluding hardware or armrests  
 (21) Left side hardware or armrest  
 (22) Left A (A1/A2)-pillar  
 (23) Left B-pillar  
 (24) Other left pillar (specify):

(25) Left side window glass or frame  
 (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (27) Other left side object (specify):  
 (28) Left side window sill  
  
**RIGHT SIDE**  
 (30) Right side interior surface, excluding hardware or armrests  
 (31) Right side hardware or armrest  
 (32) Right A (A1/A2)-pillar  
 (33) Right B-pillar  
 (34) Other right pillar (specify):  
 (35) Right side window glass or frame  
 (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (37) Other right side object (specify):  
 (38) Right side window sill  
  
**INTERIOR**  
 (40) Seat, back support  
 (41) Belt restraint webbing/buckle  
 (42) Belt restraint B-pillar or door frame attachment point  
 (43) Other restraint system component (specify):  
 (44) Head restraint system  
 (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  
 (46) Other occupants (specify):  
 (47) Interior loose objects  
 (48) Child safety seat (specify):  
 (49) Other interior object (specify):  
  
**ROOF**  
 (50) Front header  
 (51) Rear header  
 (52) Roof left side rail  
 (53) Roof right side rail  
 (54) Roof or convertible top  
  
**FLOOR**  
 (55) Floor (including toe pan)  
 (56) Floor or console mounted transmission lever, including console  
 (57) Parking brake handle  
 (58) Foot controls including parking brake  
  
**REAR**  
 (60) Backlight (rear window)

**EXTERIOR of OCCUPANT'S VEHICLE**

(65) Hood  
 (66) Outside hardware (e.g., outside mirror, antenna)  
 (67) Other exterior surface or tire (specify):  
 (68) Unknown exterior objects

**EXTERIOR OF OTHER MOTOR VEHICLE**

(70) Front bumper  
 (71) Hood edge  
 (72) Other front of vehicle (specify):

(73) Hood  
 (74) Hood ornament  
 (75) Windshield, roof rail, A-pillar  
 (76) Side surface  
 (77) Side mirrors  
 (78) Other side protrusions (specify):

(79) Rear surface  
 (80) Underside  
 (81) Tires and wheels  
 (82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

(84) Ground  
 (85) Other vehicle or object (specify):

(86) Unknown vehicle or object

**NONCONTACT INJURY**

(90) Fire in vehicle  
 (91) Flying glass  
 (92) Other noncontact injury source (specify):  
 (93) Air bag exhaust gases  
 (97) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

(1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**DIRECT/INDIRECT INJURY**

(1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source

**OCCUPANT INJURY CLASSIFICATION****Body Region**

(1) Head  
 (2) Face  
 (3) Neck  
 (4) Thorax  
 (5) Abdomen  
 (6) Spine  
 (7) Upper Extremity  
 (8) Lower Extremity  
 (9) Unspecified

**Type of Anatomic Structure**

(1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (9) Skin

**Specific Anatomic Structure**

**Whole Area**  
 (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (90) Trauma, other than mechanical

**Head - LOC**

(02) Length of LOC  
 (04, 06, 08) Level of Consciousness  
 (10) Concussion

**Spine**

(02) Cervical  
 (04) Thoracic  
 (06) Lumbar  
  
**Vessels, Nerves, Organs, Bones, Joints** are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

Specific Injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

(1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (6) Critical Injury  
 (8) Maximum (untreatable)  
 (7) Injured, unknown severity

**Aspect**

(1) Right  
 (2) Left  
 (3) Bilateral  
 (4) Central  
 (6) Anterior  
 (8) Posterior  
 (7) Superior  
 (8) Inferior  
 (9) Unknown  
 (0) Whole region

## OFFICIAL INJURY DATA – SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS = 15

Units of Blood Given

Units = +

Arterial Blood Gases

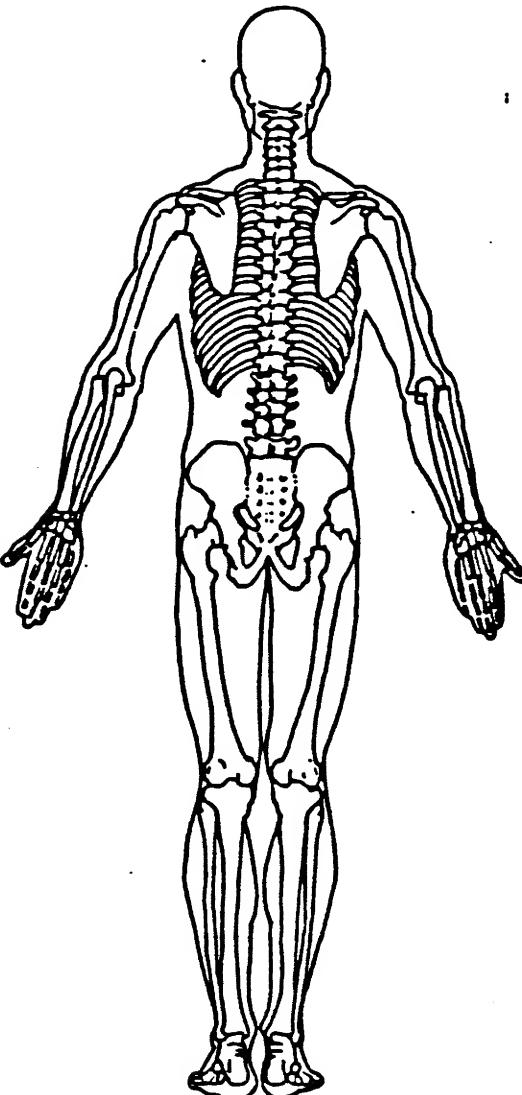
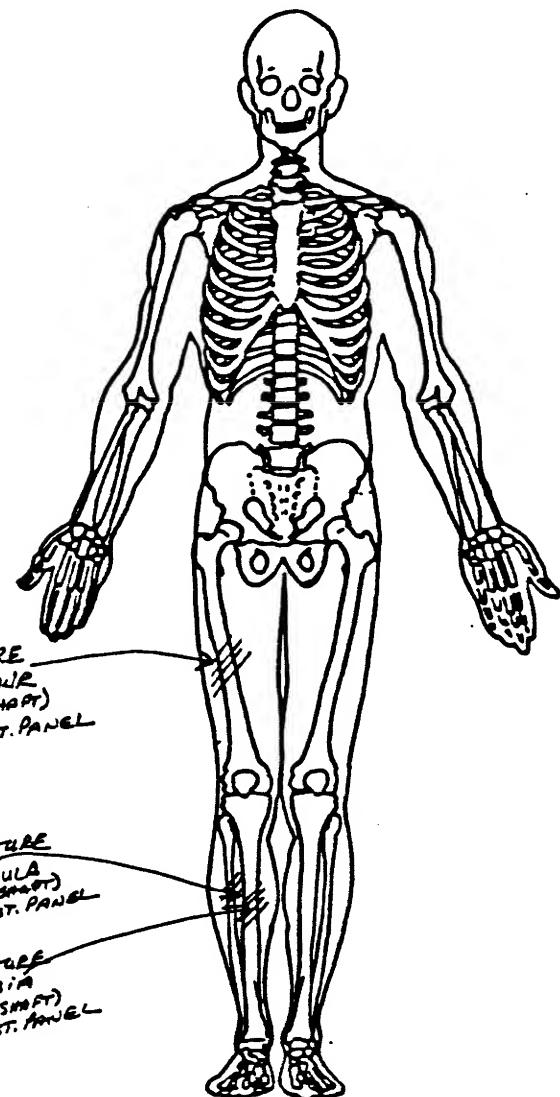
pH = -/-

PO<sub>2</sub> = +

PCO<sub>2</sub> = +

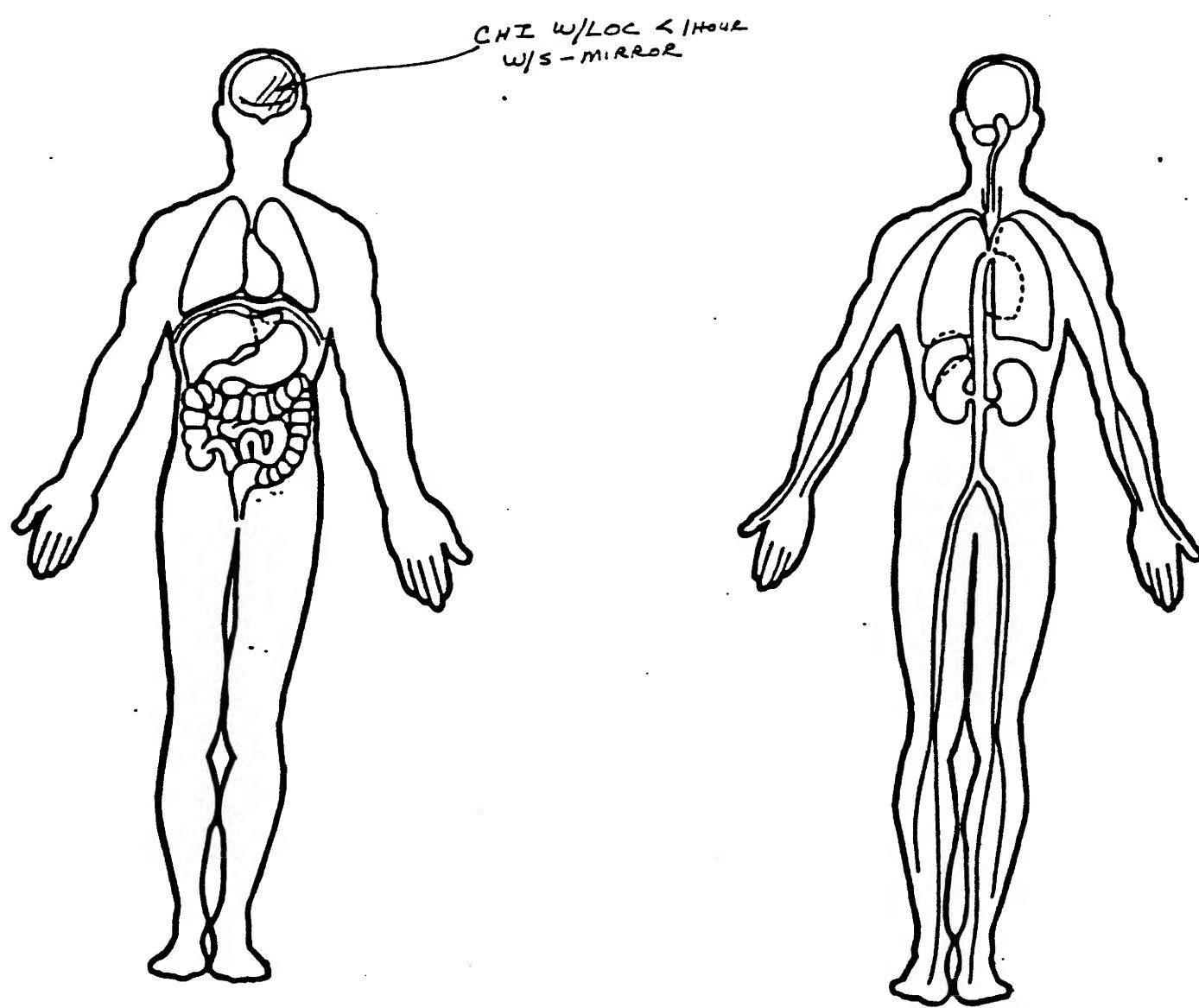
HCO<sub>3</sub> = +

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA - INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum DSI-93-AB-006
3. Vehicle Number 01
4. Occupant Number 03

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 12  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 1  
(1) Male  
(2) Female  
(9) Unknown
7. Occupant's Height 157  
Code actual height to the nearest centimeter.  
(99) Unknown  
  
62 inches X 2.54 = 157 centimeters
8. Occupant's Weight 041  
Code actual weight to the nearest kilogram.  
(99) Unknown  
  
020 pounds X .4536 = 041 kilograms
9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 21  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant  
  
(97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown
11. Occupant's Posture 0  
*Normal posture*  
(0) Normal posture  
  
*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

(0) No ejection  
(1) Complete ejection  
(2) Partial ejection  
(3) Ejection, unknown degree  
(9) Unknown

0

## 15. Medium Status (Immediately Prior To Impact)

(0) No ejection  
(1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

0

## 13. Ejection Area

(0) No ejection  
(1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear  
(7) Roof  
(8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_  
(9) Unknown

0

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

(0) Not entrapped  
(1) Entrapped  
(9) Unknown

0

## 14. Ejection Medium

(0) No ejection  
(1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):  
\_\_\_\_\_  
(5) Integral structure  
(8) Other medium (specify):  
\_\_\_\_\_  
(9) Unknown

0

## RESTRAINT SYSTEM EVALUATION

<p>17. Manual (Active) Belt System Availability <span style="float: right;">4</span></p> <p>(0) None available        (1) Belt removed/destroyed        (2) Shoulder belt        (3) Lap belt        (4) Lap and shoulder belt        (5) Belt available—type unknown</p>	<p>21. Air Bag System Availability/Function <span style="float: right;">4</span></p> <p>(0) Not equipped/not available        (1) Air bag</p> <p><i>Non-functional</i>        (2) Air bag disconnected (specify): _____        (3) Air bag not reinstalled        (9) Unknown</p>
<p><i>Integral Belt Partially Destroyed</i>        (6) Shoulder belt (lap belt destroyed/removed)        (7) Lap belt (shoulder belt destroyed/removed)</p> <p>(8) Other belt (specify): _____        (9) Unknown</p>	<p>22. Air Bag System Deployment <span style="float: right;">4</span></p> <p>(0) Not equipped/not available        (1) Air bag deployed during accident (as a result of impact)        (2) Air bag deployed inadvertently just prior to accident        (3) Air bag deployed, accident sequence undetermined        (4) Nondeployed        (5) Unknown if deployed        (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)        (9) Unknown</p>
<p>18. Manual (Active) Belt System Use <span style="float: right;">4</span></p> <p>(00) None used, not available, or belt removed/destroyed        (01) Inoperative (specify): _____        (02) Shoulder belt        (03) Lap belt        (04) Lap and shoulder belt        (05) Belt used—type unknown        (08) Other belt used (specify):        (12) Shoulder belt used with child safety seat        (13) Lap belt used with child safety seat        (14) Lap and shoulder belt used with child safety seat        (15) Belt used with child safety seat—type unknown        (18) Other belt used with child safety seat (specify):        (99) Unknown if belt used</p>	<p>23. Are There Indications of Air Bag System Failure? <span style="float: right;">4</span></p> <p>(0) Not equipped/not available        (1) No        (2) Yes (specify): _____        (9) Unknown</p>
<p>19. Proper Use of Manual (Active) Belts <span style="float: right;">4</span></p> <p>(0) None used or not available        (1) Belt used properly        (2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i>        (3) Shoulder belt worn under arm        (4) Shoulder belt worn behind back or seat        (5) Belt worn around more than one person        (6) Lap belt worn on abdomen        (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):        (8) Other improper use of manual belt system (specify):        (9) Unknown</p>	<p>24. Police Reported Restraint Use <span style="float: right;">4</span></p> <p>(0) None used        (1) Police did not indicate restraint use        (2) Shoulder belt        (3) Lap belt        (4) Lap and shoulder belt        (5) Belt used, type not specified        (6) Child safety seat        (7) Other or automatic restraint (specify):        (8) Restrained, type unknown        (9) Police indicated "unknown"</p>
<p>20. Manual (Active) Belt Failure Modes During Accident <span style="float: right;">4</span></p> <p>(0) No manual belt used        (1) No manual belt failure(s)        (2) Torn webbing (stretched webbing not included)        (3) Broken buckle or latchplate        (4) Upper anchorage separated        (5) Other anchorage separated (specify):        (6) Broken retractor        (7) Combination of above (specify):        (8) Other manual belt failure (specify):        (9) Unknown</p>	

## HEAD RESTRAINT AND SEAT EVALUATION

## 25. Head Restraint Type/Damage by Occupant at This Occupant Position

φ

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify):

(9) Unknown

## 26. Seat Type (this Occupant Position)

φ 3

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):

(10) Box mounted seat (i.e., van type)

(99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>      </u> <u>      </u> <u>      </u></p> <p>(000) No child safety seat            Applicable codes are found in your NASS CDS Data Collection, Coding and Editing            (950) Built-in child safety seat            (997) Other make/model (specify):            _____            (998) Unknown make/model            (999) Unknown if child safety seat used</p>	<p>31. Child Safety Seat Harness Usage <u>      </u> <u>      </u></p> <p>32. Child Safety Seat Shield Usage <u>      </u> <u>      </u></p> <p>33. Child Safety Seat Tether Usage <u>      </u> <u>      </u></p> <p>Note: Options below applicable to Variables OA31-OA33.</p> <p>(00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>      </u></p> <p>(0) No child safety seat            (1) Infant seat            (2) Toddler seat            (3) Convertible seat            (4) Booster seat            (7) Other type child safety seat (specify):            _____            (8) Unknown child safety seat type            (9) Unknown if child safety seat used</p>	<p><i>Not Designed With Harness/Shield/Tether</i></p> <p>(01) After market harness/shield/tether added, not used            (02) After market harness/shield/tether used            (03) Child safety seat used, but no after market harness/shield/tether added            (09) Unknown if harness/shield/tether added or used</p> <p><i>Designed With Harness/Shield/Tether</i></p> <p>(11) Harness/shield/tether not used            (12) Harness/shield/tether used            (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>      </u> <u>      </u></p> <p>(00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i></p> <p>(01) Rear facing            (02) Forward facing            (08) Other orientation (specify):            _____            (09) Unknown orientation</p> <p><i>Designed For Forward Facing for This Age/Weight</i></p> <p>(11) Rear facing            (12) Forward facing            (18) Other orientation (specify):            _____            (19) Unknown orientation</p> <p><i>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight</i></p> <p>(21) Rear facing            (22) Forward facing            (28) Other orientation (specify):            _____            (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i></p> <p>(21) Harness/shield/tether not used            (22) Harness/shield/tether used            (29) Unknown if harness/shield/tether used</p> <p>(99) Unknown if child safety seat used</p>

## INJURY CONSEQUENCES

## 34. Injury Severity (Police Rating)

(0) O - No injury  
 (1) C - Possible injury  
 (2) B - Nonincapacitating injury  
 (3) A - Incapacitating injury  
 (4) K - Killed  
 (5) U - Injury, severity unknown  
 (6) Died prior to accident  
 (9) Unknown

3

## 35. Treatment - Mortality

(0) No treatment  
 (1) Fatal  
 (2) Fatal - ruled disease (specify):  
 \_\_\_\_\_

4*Nonfatal*

(3) Hospitalization  
 (4) Transported and released  
 (5) Treatment at scene - nontransported  
 (6) Treatment later  
 (8) Treatment - other (specify):  
 \_\_\_\_\_

(9) Unknown

## 36. Type Of Medical Facility (for Initial Treatment)

(0) Not treated at a medical facility  
 (1) Trauma center  
 (2) Hospital  
 (3) Medical clinic  
 (4) Physician's office  
 (5) Treatment later at medical facility  
 (8) Other (specify):  
 \_\_\_\_\_

(9) Unknown

2

## 37. Hospital Stay

(00) Not Hospitalized  
 \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.  
 (61) 61 days or more  
 (99) Unknown

φ φ

## 99. Case Occupant

(0) Not the Case Occupant  
 (1) This is the Case Occupant  
 (2) This is the Case Occupant in another case.

φ

## 38. Working Days Lost

\_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident  
 (00) No working days lost  
 (61) 61 days or more  
 (62) Fatally Injured  
 (97) Not working prior to accident  
 (99) Unknown

9 7

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

## 39. Time to Death

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

φ φ

## 40. 1st Medically Reported Cause of Death

φ φ

## 41. 2nd Medically Reported Cause of Death

φ φ

## 42. 3rd Medically Reported Cause of Death

φ φ

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
 \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify):  
 \_\_\_\_\_

(99) Unknown

## 43. Number of Recorded Injuries for This Occupant

φ 2

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**

44. Automatic (Passive) Belt System Availability/ φ  
**Function**  
 (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

**Non-functional**

(4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use cb  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type φ  
 (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System φ  
 (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

(3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident φ

(0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

49. Seat Orientation (this Occupant Position) +

(0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 9 7  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

51. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units):  
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  2 7  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the  $\text{HCO}_3$   
 (96) ABGs reported,  $\text{HCO}_3$  unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? NO  YES

UPDATE CANDIDATE?

NO  YES



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	2. Case Number - Stratum	3. Vehicle Number	4. Occupant Number
	DST-93-AB-006	Φ 1	Φ 3

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

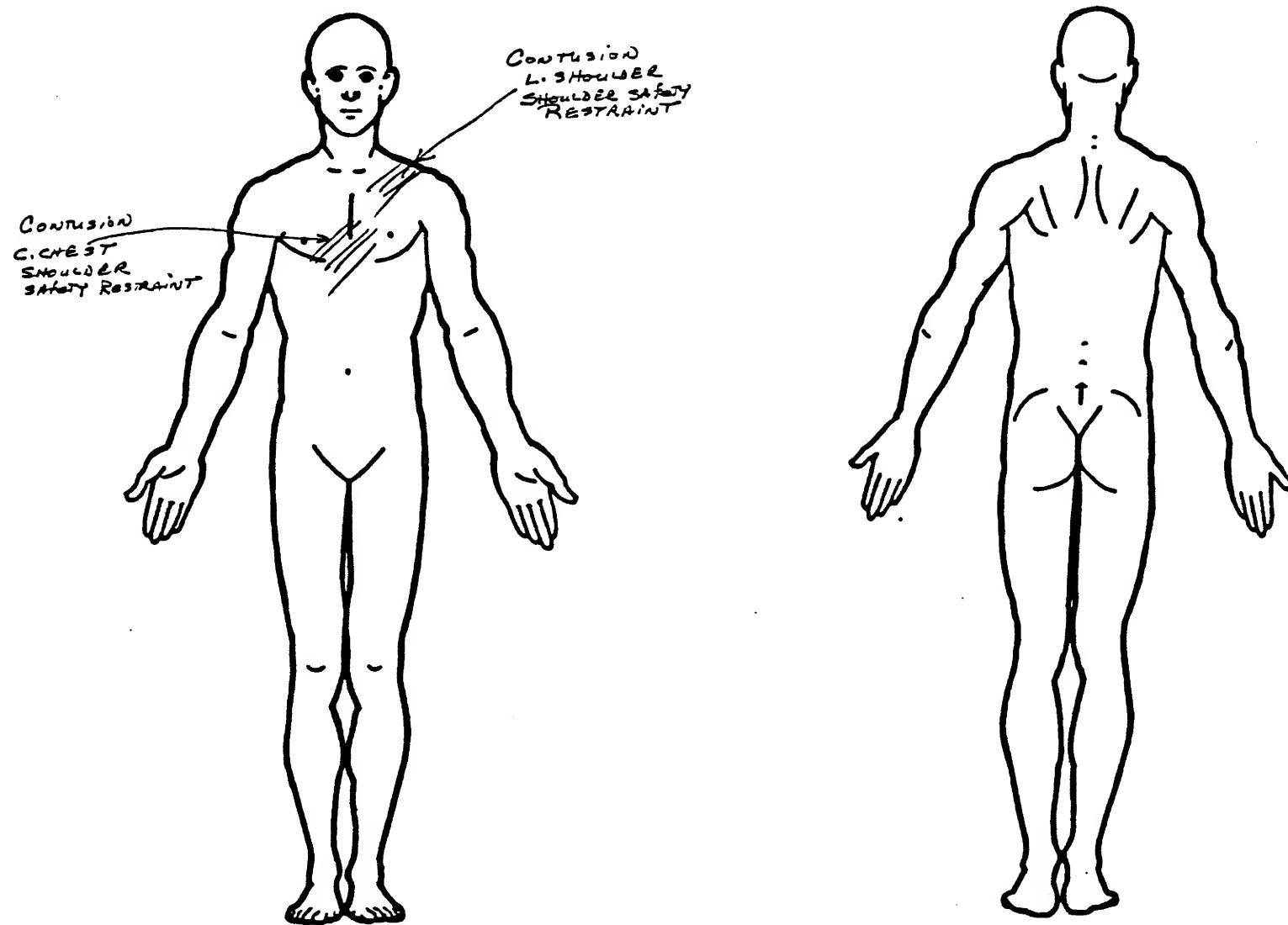
O.I.C.-A.I.S										Injury Source	Occupant	
Source of Injury Date	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Confidence Level	Direct/Indirect Injury	Area Intrusion	Number	
1st	5. 7	6. 7	7. 9	8. Φ 4	9. Φ 2	10. 1	11. 2	12. 4 1	13. 1	14. 1	15. Φ Φ	923. Φ Φ
2nd	16. 7	17. 4	18. 9	19. Φ 4	20. Φ 2	21. 1	22. 4	23. 4 1	24. 1	25. 1	26. Φ Φ	922. 1
3rd	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	
4th	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.	
5th	49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.	
6th	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.	
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.	
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.	

ICD-9

## OCCUPANT INJURY DATA

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**SOURCE OF INJURY DATA****OFFICIAL**

(1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL**

(5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

**INJURY SOURCE****FRONT**

(10) Windshield  
 (11) Mirror  
 (12) Sunvisor  
 (13) Steering wheel rim  
 (14) Steering wheel hub/spoke  
 (15) Steering wheel (combination of codes 04 and 05)  
 (16) Steering column, transmission selector lever, other attachment  
 (17) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (18) Left instrument panel and below  
 (19) Center instrument panel and below  
 (20) Right instrument panel and below  
 (21) Glove compartment door  
 (22) Knee bolster  
 (23) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (24) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (25) Driver side air bag compartment cover  
 (26) Passenger side air bag compartment cover  
 (27) Windshield reinforced by exterior object (specify):  
 (28) Other front object (specify):

**LEFT SIDE**

(29) Left side interior surface, excluding hardware or armrests  
 (30) Left side hardware or armrest  
 (31) Left A (A1/A2)-pillar  
 (32) Left B-pillar  
 (33) Other left pillar (specify):

(26) Left side window glass or frame  
 (27) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (28) Other left side object (specify):

**LEFT SIDE**

(29) Right side interior surface, excluding hardware or armrests  
 (30) Right side hardware or armrest  
 (31) Right A (A1/A2)-pillar  
 (32) Right B-pillar  
 (33) Other right pillar (specify):

(34) Right side window glass or frame  
 (35) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (36) Other right side object (specify):

**RIGHT SIDE**

(37) Right side window glass or frame  
 (38) Right side window sill  
 (39) Interior  
 (40) Seat, back support  
 (41) Belt restraint webbing/buckle  
 (42) Belt restraint B-pillar or door frame attachment point  
 (43) Other restraint system component (specify):  
 (44) Head restraint system  
 (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  
 (46) Other occupants (specify):  
 (47) Interior loose objects  
 (48) Child safety seat (specify):  
 (49) Other interior object (specify):

**ROOF**

(50) Front header  
 (51) Rear header  
 (52) Roof left side rail  
 (53) Roof right side rail  
 (54) Roof or convertible top

**FLOOR**

(55) Floor (including toe pan)  
 (56) Floor or console mounted transmission lever, including console  
 (57) Parking brake handle  
 (58) Foot controls including parking brake

**REAR**

(59) Backlight (rear window)

(61) Backlight storage rack, door, etc.  
 (62) Other rear object (specify):

**EXTERIOR of OCCUPANT'S VEHICLE**

(63) Hood  
 (64) Outside hardware (e.g., outside mirror, antenna)  
 (65) Other exterior surface or tires (specify):  
 (66) Unknown exterior object

**EXTERIOR of OTHER MOTOR VEHICLE**

(67) Front bumper  
 (68) Hood edge  
 (69) Other front of vehicle (specify):

(70) Hood  
 (71) Hood ornament  
 (72) Windshield, roof rail, A-pillar  
 (73) Side surface  
 (74) Side mirrors  
 (75) Other side protrusions (specify):

(76) Rear surface  
 (77) Undercarriage  
 (78) Tires and wheels  
 (79) Other exterior of other motor vehicle (specify):

**UNKNOWN EXTERIOR of OTHER MOTOR VEHICLE**

(80) Other vehicle or object (specify):  
 (81) Unknown vehicle or object

**NONCONTACT INJURY**

(82) Fire in vehicle  
 (83) Flying glass  
 (84) Other noncontact injury source (specify):  
 (85) Air bag exhaust gases  
 (86) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

(1) Certain  
 (2) Probable  
 (3) Possible  
 (4) Unknown

**DIRECT/INDIRECT INJURY**

(1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (4) Injured, unknown source

**OCCUPANT INJURY CLASSIFICATION****Body Region**

(1) Head  
 (2) Face  
 (3) Neck  
 (4) Thorax  
 (5) Abdomen  
 (6) Spine  
 (7) Upper Extremity  
 (8) Lower Extremity  
 (9) Unspecified

**Type of Anatomic Structure**

(1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (7) Skin

**Specific Anatomic Structure**

**Whole Area**  
 (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (90) Trauma, other than mechanical

**Head - LOC**

(02) Length of LOC  
 (04, 06, 08) Level of Consciousness  
 (10) Concussion

**Spine**

(02) Cervical  
 (04) Thoracic  
 (06) Lumbar

**Vessels, Nerves, Organs, Bones, Joints**

are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

(1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (5) Critical Injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

**Aspect**

(1) Right  
 (2) Left  
 (3) Bilateral  
 (4) Central  
 (5) Anterior  
 (6) Posterior  
 (7) Superior  
 (8) Inferior  
 (9) Unknown  
 (0) Whole region

## OFFICIAL INJURY DATA – SKELETAL INJURIES

Restrained?

No

Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS = 15

Units of Blood Given

Units = 0

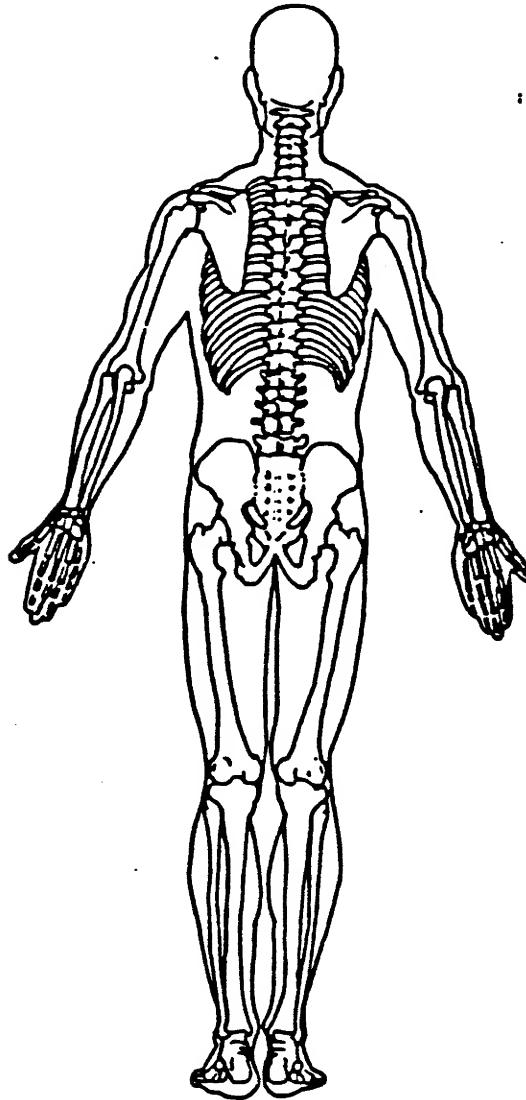
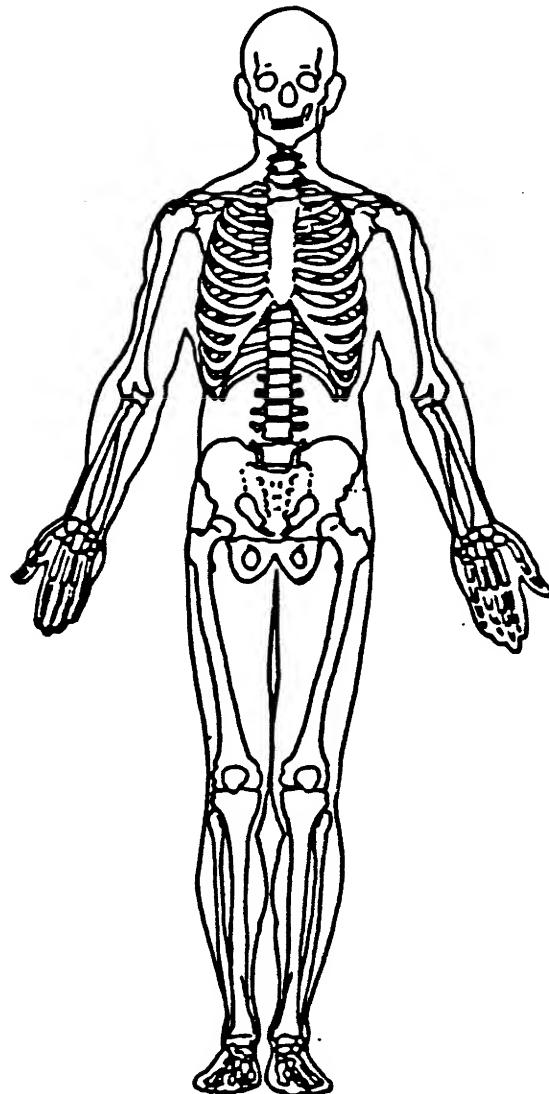
Arterial Blood Gases

pH = 7.4

PO<sub>2</sub> = 95

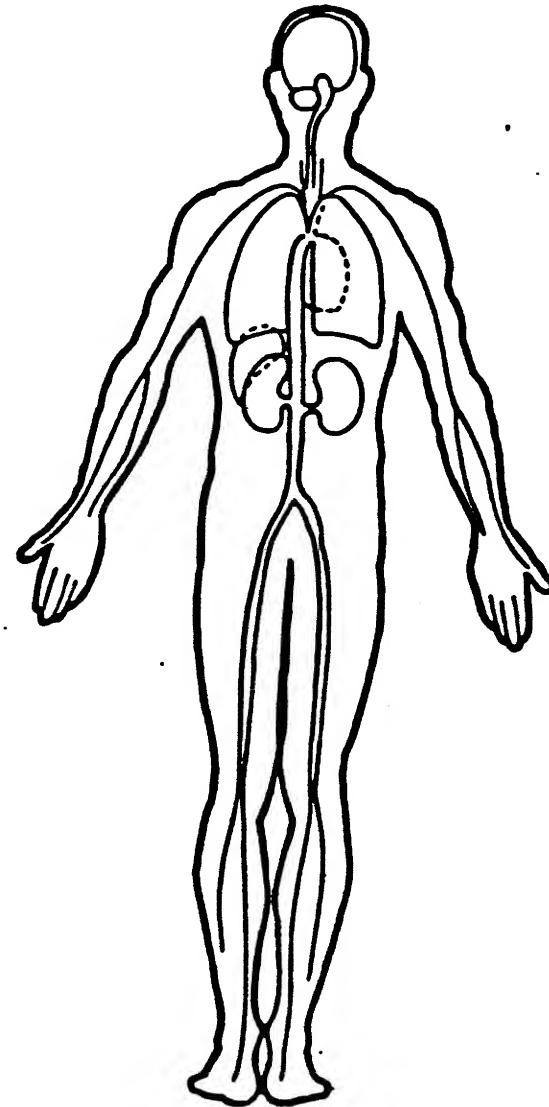
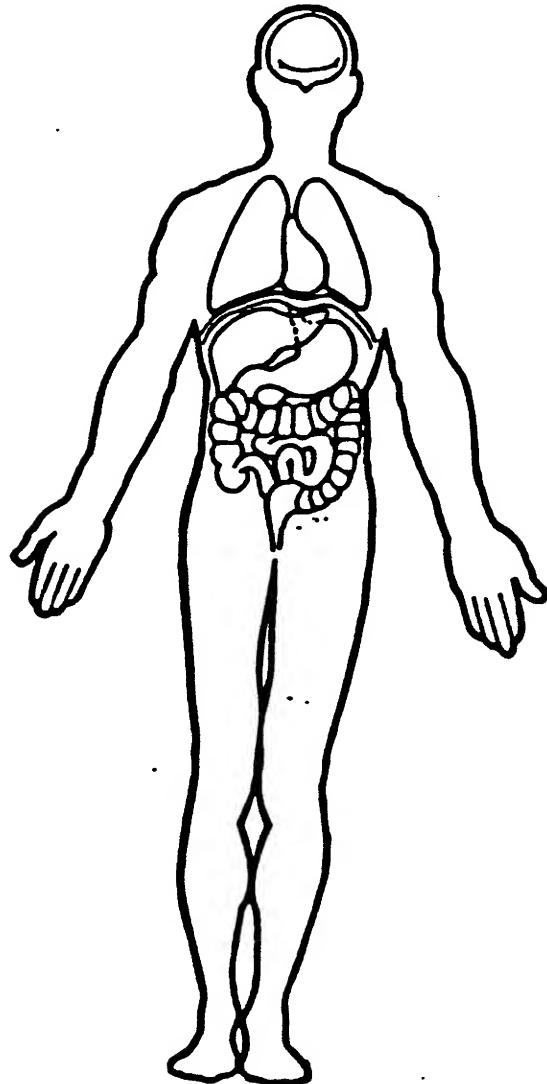
PCO<sub>2</sub> = 38

HCO<sub>3</sub> = 24



## OFFICIAL INJURY DATA - INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum DSI-93-AB-006
3. Vehicle Number 01
4. Occupant Number 04

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 14  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
  
(97) 97 years and older  
(99) Unknown

6. Occupant's Sex 2  
(1) Male  
(2) Female  
(9) Unknown

7. Occupant's Height 163  
Code actual height to the nearest centimeter.  
(999) Unknown  
  
64 inches X 2.54 = 163 centimeters

8. Occupant's Weight 61  
Code actual weight to the nearest kilogram.  
(999) Unknown  
  
135 pounds X .4536 = 61 kilograms

9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

10. Occupant's Seat Position 23

*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify): \_\_\_\_\_  
(15) On or in the lap of another occupant

*Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify): \_\_\_\_\_  
(25) On or in the lap of another occupant

*Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify): \_\_\_\_\_  
(35) On or in the lap of another occupant

*Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify): \_\_\_\_\_  
(45) On or in the lap of another occupant

(97) In or on unenclosed area  
(98) Other seat (specify): \_\_\_\_\_  
(99) Unknown

11. Occupant's Posture 0  
(0) Normal posture

*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify): \_\_\_\_\_  
(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):  
\_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify):  
\_\_\_\_\_
- (9) Unknown

0

## 15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

0

## RESTRAINT SYSTEM EVALUATION

## 17. Manual (Active) Belt System Availability

4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

## (8) Other belt (specify):

Unknown

## 18. Manual (Active) Belt System Use

Ø 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

## (02) Shoulder belt

## (03) Lap belt

## (04) Lap and shoulder belt

## (05) Belt used—type unknown

## (08) Other belt used (specify):

## (12) Shoulder belt used with child safety seat

## (13) Lap belt used with child safety seat

## (14) Lap and shoulder belt used with child safety seat

## (15) Belt used with child safety seat—type unknown

## (18) Other belt used with child safety seat (specify):

## (99) Unknown if belt used

## 19. Proper Use of Manual (Active) Belts

1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## 20. Manual (Active) Belt Failure Modes

*During Accident*

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## 21. Air Bag System Availability/Function

Ø

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):
- (3) Air bag not reinstalled
- (9) Unknown

## 22. Air Bag System Deployment

Ø

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

## 23. Are There Indications of Air Bag System Failure?

Ø

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (9) Unknown

**Note:** See Variables 44 through 48 (Page 5) for Information on Automatic Belts

## 24. Police Reported Restraint Use

4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify):
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

## 25. Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints  
(1) Integral—no damage  
(2) Integral—damaged during accident  
(3) Adjustable—no damage  
(4) Adjustable—damaged during accident  
(5) Add-on—no damage  
(6) Add-on—damaged during accident  
(8) Other (specify): \_\_\_\_\_

(9) Unknown

4

## 27. Seat Performance (this Occupant Position)

(0) Occupant not seated or no seat  
(1) No seat performance failure(s)  
(2) Seat adjusters failed  
(3) Seat back folding locks or "seat back" failed  
(4) Seat track/anchors failed  
(5) Deformed by impact of occupant  
(6) Deformed by passenger compartment intrusion  
(specify): \_\_\_\_\_

1

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## 26. Seat Type (this Occupant Position)

4 3

(00) Occupant not seated or no seat  
(01) Bucket  
(02) Bucket with folding back  
(03) Bench  
(04) Bench with separate back cushions  
(05) Bench with folding back(s)  
(06) Split bench with separate back cushions  
(07) Split bench with folding back(s)  
(08) Pedestal (i.e., column supported)  
(09) Other seat type (specify): \_\_\_\_\_

(10) Box mounted seat (i.e., van type)  
(99) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>      ∅      ∅      ∅      </u></p> <p>(000) No child safety seat  Applicable codes are found in your NASS CDS Data Collection, Coding and Editing  (950) Built-in child safety seat  (997) Other make/model (specify):    <u>(998) Unknown make/model</u>  <u>(999) Unknown if child safety seat used</u></p>	<p>31. Child Safety Seat Harness Usage <u>      ∅      ∅      </u></p> <p>32. Child Safety Seat Shield Usage <u>      ∅      ∅      </u></p> <p>33. Child Safety Seat Tether Usage <u>      ∅      ∅      </u></p> <p>Note: Options below applicable to Variables OA31-OA33.</p> <p>(00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>      ∅      </u></p> <p>(0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):    <u>(8) Unknown child safety seat type</u>  <u>(9) Unknown if child safety seat used</u></p>	<p><i>Not Designed With Harness/Shield/Tether</i></p> <p>(01) After market harness/shield/tether added, not used  (02) After market harness/shield/tether used  (03) Child safety seat used, but no after market harness/shield/tether added  (09) Unknown if harness/shield/tether added or used</p> <p><i>Designed With Harness/Shield/Tether</i></p> <p>(11) Harness/shield/tether not used  (12) Harness/shield/tether used  (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>      ∅      ∅      </u></p> <p>(00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i></p> <p>(01) Rear facing  (02) Forward facing  (08) Other orientation (specify):    <u>(09) Unknown orientation</u></p> <p><i>Designed For Forward Facing for This Age/Weight</i></p> <p>(11) Rear facing  (12) Forward facing  (18) Other orientation (specify):    <u>(19) Unknown orientation</u></p> <p><i>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight</i></p> <p>(21) Rear facing  (22) Forward facing  (28) Other orientation (specify):    <u>(29) Unknown orientation</u></p> <p><u>(99) Unknown if child safety seat used</u></p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i></p> <p>(21) Harness/shield/tether not used  (22) Harness/shield/tether used  (29) Unknown if harness/shield/tether used</p> <p><i>(99) Unknown if child safety seat used</i></p>

**INJURY CONSEQUENCES****34. Injury Severity (Police Rating)**

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

3**35. Treatment - Mortality**

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

3*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

**36. Type Of Medical Facility (for Initial Treatment)**1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

**37. Hospital Stay**0 7

- (00) Not Hospitalized  
Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**99. Case Occupant**0

- (0) Not the Case Occupant
- (1) This is the Case Occupant
- (2) This is the Case Occupant in another case.

**38. Working Days Lost**9 7

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER****39. Time to Death**0 0

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

**40. 1st Medically Reported Cause of Death**0 0**41. 2nd Medically Reported Cause of Death**0 0**42. 3rd Medically Reported Cause of Death**0 0

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

- (99) Unknown

**43. Number of Recorded Injuries for This Occupant**0 6

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/ Function**

(0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

(4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use**

(0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type**

(0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive Belt System)**

(0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

(3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes***During Accident*

(0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)**

(0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score**

(at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?**

(1) No - blood not given  
 (2) Yes - blood given  
 (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>**

(00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED  
 WITH INITIAL SUBMISSION?

NO [X] YES [ ]

UPDATE CANDIDATE?

NO [X] YES [ ]



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number \_\_\_\_\_

6 1

2. Case Number - Stratum 1 SI-93-AB-006

4. Occupant Number

0 4

### INJURY DATA

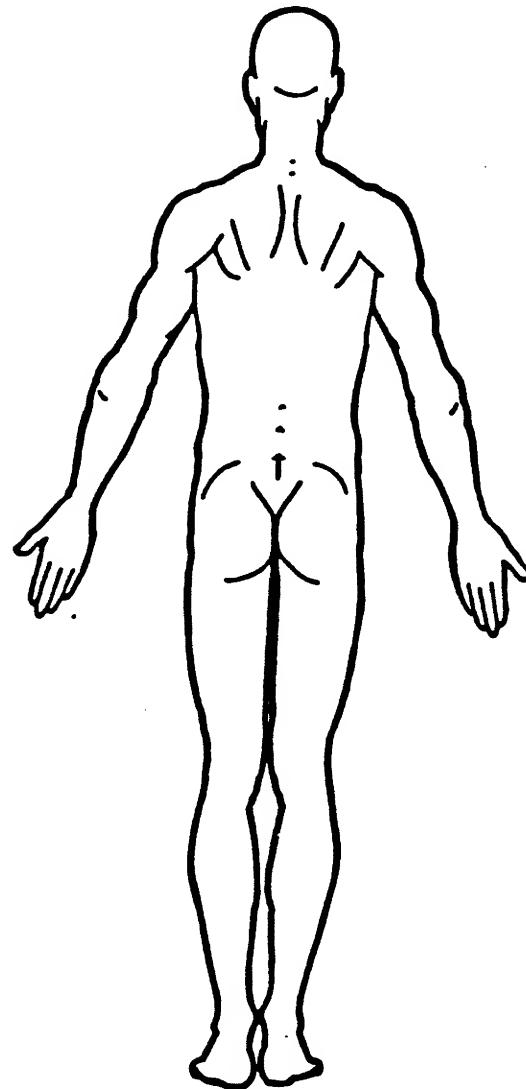
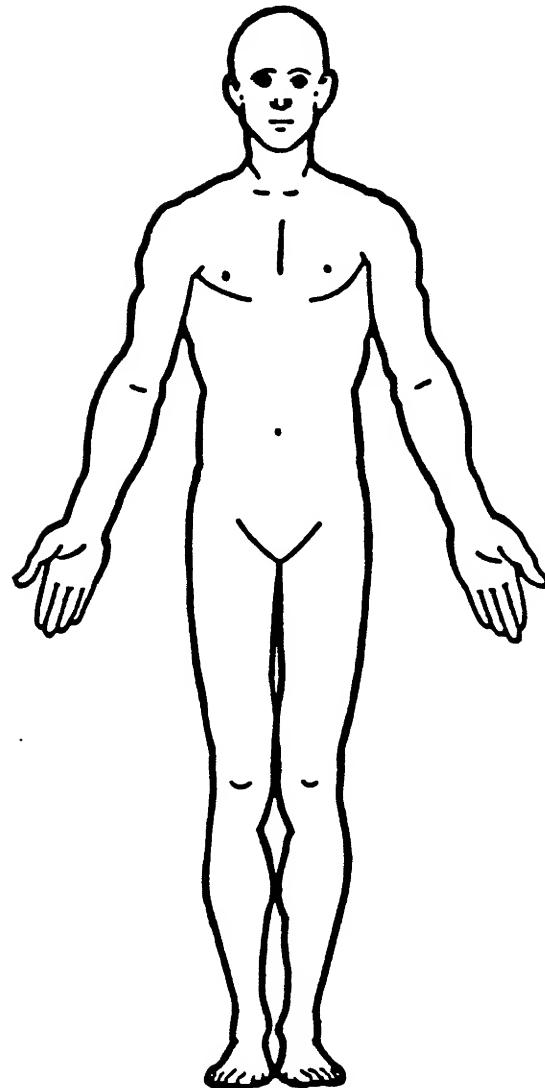
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	O.I.C.-A.I.S						Injury Source	Injury Confidence Level	Occupant Area	Occupant Intrusion Number	ICD-9	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
1st	5. 2	6. 5	7. 4	8. 42	9. 40	10. 3	11. 2	12. 41	13. 1	14. 2	15. 00	865.02
2nd	16. 2	17. 4	18. 4	19. 14	20. 02	21. 3	22. 2	23. 41	24. 1	25. 2	26. 00	860.0
3rd	27. 2	28. 7	29. 5	30. 22	31. 00	32. 2	33. 1	34. 41	35. 1	36. 1	37. 00	810.00
4th	38. 2	39. 5	40. 4	41. 08	42. 10	43. 2	44. 8	45. 41	46. 1	47. 2	48. 00	863.42
5th	49. 2	50. 5	51. 4	52. 28	53. 12	54. 2	55. 1	56. 41	57. 1	58. 2	59. 00	863.80
6th	60. 2	61. 5	62. 4	63. 20	64. 10	65. 2	66. 8	67. 41	68. 1	69. 2	70. 00	863.20
7th	71. __	72. __	73. __	74. __	75. __	76. __	77. __	78. __	79. __	80. __	81. __	
8th	82. __	83. __	84. __	85. __	86. __	87. __	88. __	89. __	90. __	91. __	92. __	
9th	93. __	94. __	95. __	96. __	97. __	98. __	99. __	100. __	101. __	102. __	103. __	
10th	104. __	105. __	106. __	107. __	108. __	109. __	110. __	111. __	112. __	113. __	114. __	

## OCCUPANT INJURY DATA

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**SOURCE OF INJURY DATA****OFFICIAL**

(1) Autopay records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL**

(5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

**INJURY SOURCE****FRONT**

(01) Windshield  
 (02) Mirror  
 (03) Sunvisor  
 (04) Steering wheel rim  
 (05) Steering wheel hub/spoke  
 (06) Steering wheel (combination of codes 04 and 05)  
 (07) Steering column, transmission selector lever, other attachment  
 (08) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (09) Left instrument panel and below  
 (10) Center instrument panel and below  
 (11) Right instrument panel and below  
 (12) Glove compartment door  
 (13) Knee bolster  
 (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (16) Driver side air bag compartment cover  
 (17) Passenger side air bag compartment cover  
 (18) Windshield reinforced by exterior object (specify):  
 (19) Other front object (specify):

**LEFT SIDE**

(20) Left side interior surface, excluding hardware or armrests  
 (21) Left side hardware or armrest  
 (22) Left A (A1/A2)-pillar  
 (23) Left B-pillar  
 (24) Other left pillar (specify):

(25) Left side window glass or frame  
 (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (27) Other left side object (specify):  
 (28) Left side window sill

**RIGHT SIDE**

(30) Right side interior surface, excluding hardware or armrests  
 (31) Right side hardware or armrest  
 (32) Right A (A1/A2)-pillar  
 (33) Right B-pillar  
 (34) Other right pillar (specify):

(35) Right side window glass or frame  
 (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (37) Other right side object (specify):  
 (38) Right side window sill

**INTERIOR**

(40) Seat, back support  
 (41) Belt restraint webbing/buckle  
 (42) Belt restraint B-pillar or door frame attachment point  
 (43) Other restraint system component (specify):  
 (44) Head restraint system  
 (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  
 (46) Other occupants (specify):  
 (47) Interior loose objects  
 (48) Child safety seat (specify):  
 (49) Other interior object (specify):

**ROOF**

(50) Front header  
 (51) Rear header  
 (52) Roof left side rail  
 (53) Roof right side rail  
 (54) Roof or convertible top

**FLOOR**

(56) Floor (including toe pan)  
 (57) Floor or console mounted transmission lever, including console  
 (58) Parking brake handle  
 (59) Foot controls including parking brake

**REAR**

(60) Backlight (rear window)

(61) Backlight storage rack, door, etc.  
 (62) Other rear object (specify):

**EXTERIOR of OCCUPANT'S VEHICLE**

(66) Hood  
 (66) Outside hardware (e.g., outside mirror, antenna)  
 (67) Other exterior surface or tire (specify):  
 (68) Unknown exterior objects

**EXTERIOR OF OTHER MOTOR VEHICLE**

(70) Front bumper  
 (71) Hood edge  
 (72) Other front of vehicle (specify):

(73) Hood  
 (74) Hood ornament  
 (76) Windshield, roof rail, A-pillar  
 (78) Side surface  
 (77) Side mirrors  
 (78) Other side protrusions (specify):

(79) Rear surface  
 (80) Undercarriage  
 (81) Tires and wheels  
 (82) Other exterior of other motor vehicle (specify):  
 (83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

(84) Ground  
 (85) Other vehicle or object (specify):  
 (86) Unknown vehicle or object

**NONCONTACT INJURY**

(80) Fire in vehicle  
 (81) Flying glass  
 (82) Other noncontact injury source (specify):  
 (83) Air bag exhaust gases  
 (87) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

(1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**DIRECT/INDIRECT INJURY**

(1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source

**OCCUPANT INJURY CLASSIFICATION****Body Region**

(1) Head  
 (2) Face  
 (3) Neck  
 (4) Thorax  
 (5) Abdomen  
 (6) Spine  
 (7) Upper Extremity  
 (8) Lower Extremity  
 (9) Unspecified

**Type of Anatomic Structure**

(1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (9) Skin

**Specific Anatomic Structure**

**Whole Area**  
 (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (80) Trauma, other than mechanical

**Head - LOC**  
 (02) Length of LOC  
 (04, 06, 08) Level of Consciousness  
 (10) Concussion

**Spine**

(02) Cervical  
 (04) Thoracic  
 (06) Lumbar

**Vessels, Nerves, Organs, Bones, Joints**

are assigned consecutive two digit numbers beginning with 02

(1) Minor injury  
 (2) Moderate injury  
 (3) Serious injury  
 (4) Severe injury  
 (5) Critical injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

**Level of Injury**

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

(1) Right  
 (2) Left  
 (3) Bilateral  
 (4) Central  
 (5) Anterior  
 (6) Posterior  
 (7) Superior  
 (8) Inferior  
 (9) Unknown  
 (0) Whole region

**Aspect**

## OFFICIAL INJURY DATA – SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS = 15

Units of Blood Given

Units = 1

Arterial Blood Gases

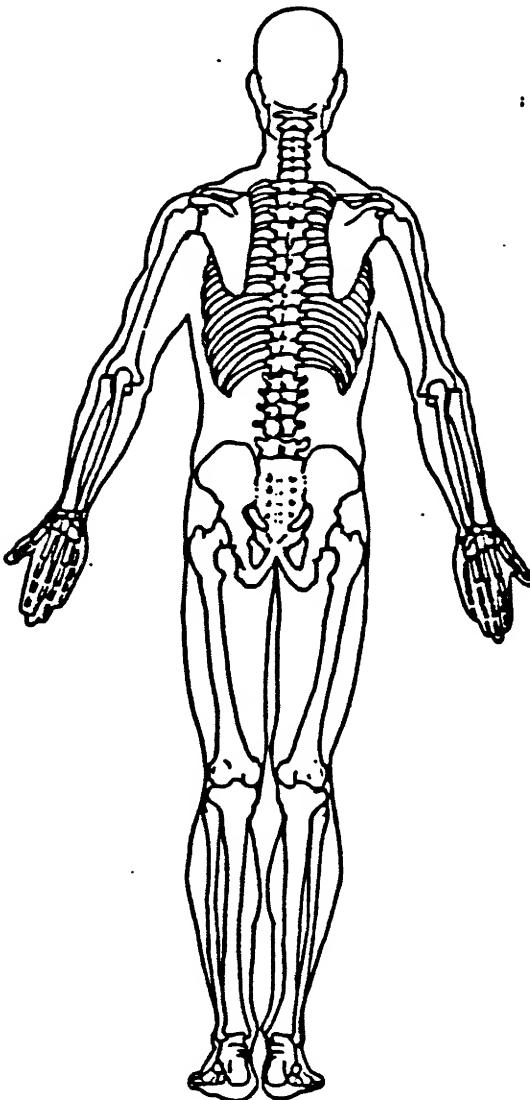
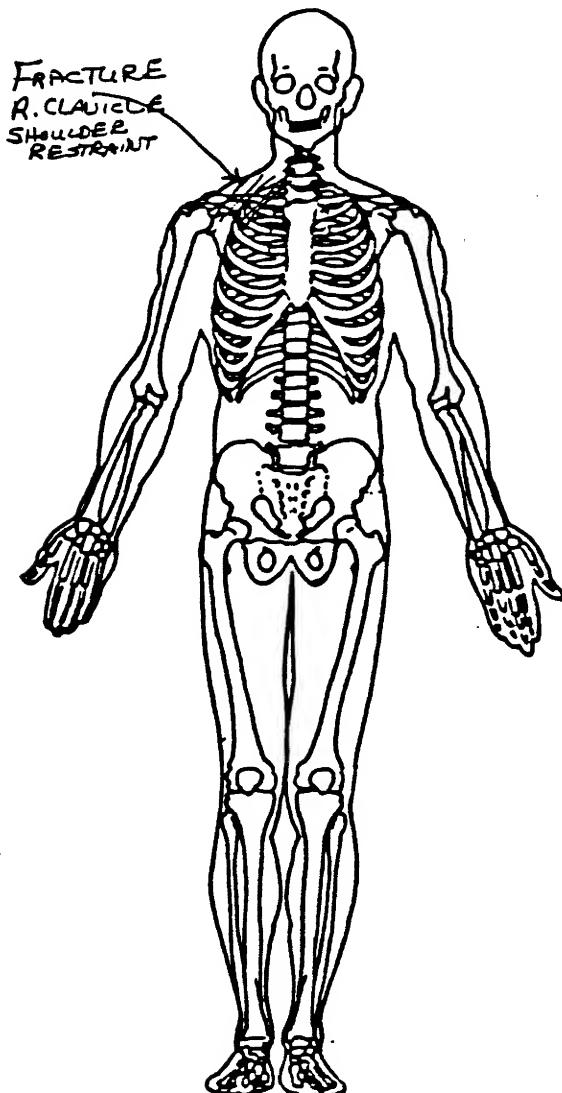
pH = 7.4

PO<sub>2</sub> = 100

PCO<sub>2</sub> = 35

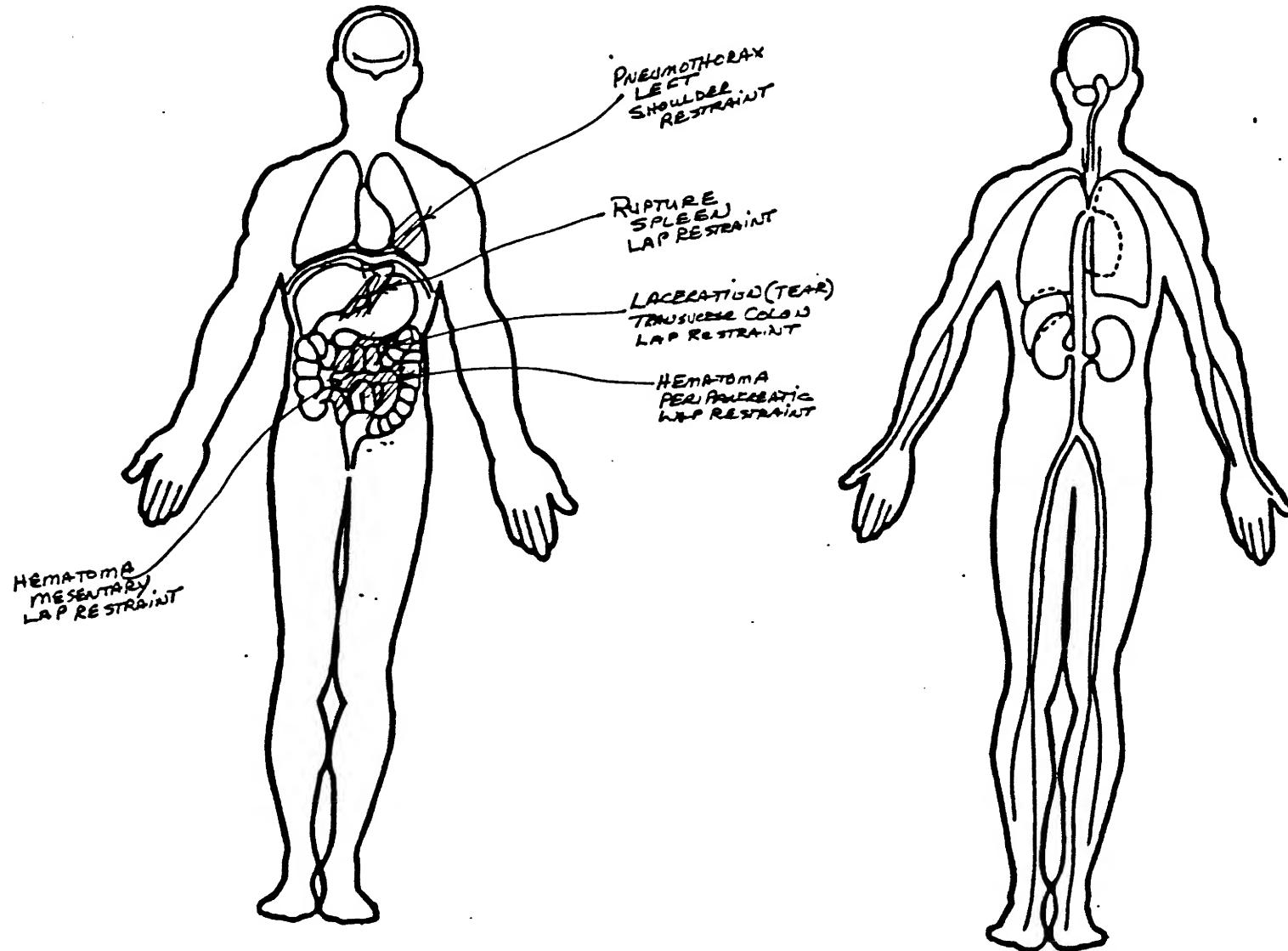
HCO<sub>3</sub> = 25

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA - INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# GENERAL VEHICLE FORM

1. Primary Sampling Unit Number	— —	11. Police Reported Alcohol Presence	— <u>4</u>
2. Case Number - Stratum	<u>D SI-93-4B-006</u>	(0) No alcohol present	
3. Vehicle Number	<u>0 2</u>	(1) Yes (alcohol present)	
<b>VEHICLE IDENTIFICATION</b>			
4. Vehicle Model Year	<u>9 2</u>	(7) Not reported	
Code the last two digits of the model year		(8) No driver present	
(99) Unknown		(9) Unknown	
5. Vehicle Make (specify):	<u>F O R D</u>	Note: See variables 37 through 55 (Page 4) for information on Other Drugs	
Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.		12. Alcohol Test Result For Driver	<u>9 6</u>
(99) Unknown		Code actual value (decimal implied before first digit—0.xx)	
6. Vehicle Model (specify):	<u>T A U R U S</u>	(95) Test refused	
Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.		(96) None given	
(99) Unknown		(97) AC test performed, results unknown	
7. Body Type	<u>0 6</u>	(98) No driver present	
Note: Applicable codes may be found on the back of this page.		(99) Unknown	
8. Vehicle Identification Number	<u>1 E A C P 5 7 U 5 N A</u> — — — — —	Source: <u>P A R</u>	
Left justify; Slash zeros and letter Z (0 and Z) No VIN—Code all zeros Unknown—Code all nine's		<b>ACCIDENT RELATED</b>	
9. Police Reported Vehicle Disposition	<u>1</u>	13. Speed Limit	<u>0 5 6</u>
(0) Not towed due to vehicle damage		(000) No statutory limit	
(1) Towed due to vehicle damage		Code posted or statutory speed limit in kph	
(9) Unknown		(999) Unknown	
10. Police Reported Travel Speed	<u>9 9 9</u>	<u>3 5</u> mph X 1.6093 = <u>0 5 6</u> kph	
Code to the nearest kph (NOTE: 000 means less than 0.5 kph) (160) 159.5 kph and above (999) Unknown		14. Attempted Avoidance Maneuver	<u>0 4</u>
<u>      </u> mph X 1.6093 = <u>      </u> kph		(00) No impact	
		(01) No avoidance actions	
		(02) Braking (no lockup)	
		(03) Braking (lockup)	
		(04) Braking (lockup unknown)	
		(05) Releasing brakes	
		(06) Steering left	
		(07) Steering right	
		(08) Braking and steering left	
		(09) Braking and steering right	
		(10) Accelerating	
		(11) Accelerating and steering left	
		(12) Accelerating and steering right	
		(97) No driver present	
		(98) Other action (specify):	
		(99) Unknown	
15. Accident Type	<u>6 8</u>	Applicable codes may be found on the back of page two of this field form	
		(00) No impact	
		Code the number of the diagram that best describes the accident circumstance	
		(98) Other accident type (specify):	
		(99) Unknown	

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

# CODES FOR BODY TYPE

BEST AVAILABLE COPY

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Bret, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [78 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chataau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vendura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500.)

- (32) Pickup with slide-in camper

- (33) Convertible pickup

- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq$  8,850 kgs)
- (62) Single unit straight truck (8,850 kgs  $<$  GVWR  $\leq$  12,000 kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

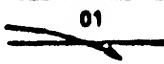
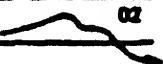
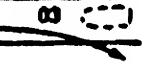
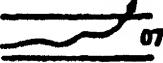
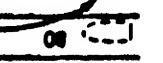
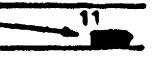
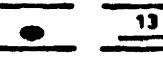
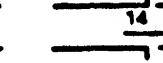
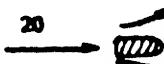
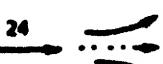
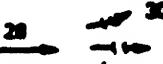
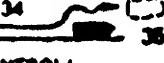
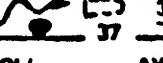
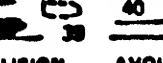
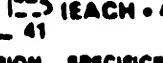
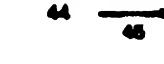
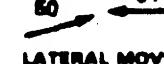
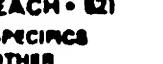
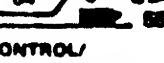
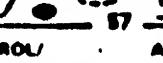
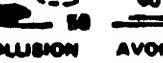
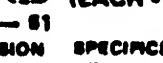
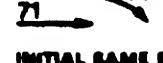
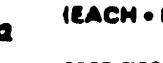
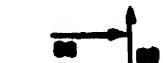
### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

<b>OCCUPANT RELATED</b>		
<p>16. Driver Presence in Vehicle            (0) Driver not present            (1) Driver present            (9) Unknown</p>		1
<p>17. Number of Occupants This Vehicle            (00-96) Code actual number of occupants for this vehicle            (97) 97 or more            (99) Unknown</p>		0 1
<p>18. Number of Occupant Forms Submitted</p>		0 1
<b>VEHICLE WEIGHT ITEMS</b>		
<p>19. Vehicle Curb Weight            _____ Code weight to nearest 10 kilograms.            (045) Less than 450 kilograms            (610) 6,100 kilograms or more            (999) Unknown</p>		1.490
		$0.3294 \text{ lbs} \times .4536 = 1.494 \text{ kgs}$
<p>Source: _____</p>		
<p>20. Vehicle Cargo Weight            _____ Code weight to nearest 10 kilograms.            (000) Less than 5 kilograms            (450) 4,500 kilograms or more            (999) Unknown</p>		0.070
		$0.0150 \text{ lbs} \times .4536 = 0.068 \text{ kgs}$
<b>RECONSTRUCTION DATA</b>		
<p>21. Towed Trailing Unit            (0) No towed unit            (1) Yes—towed trailing unit            (9) Unknown</p>		0
<p>22. Documentation of Trajectory Data for This Vehicle            (0) No            (1) Yes</p>		0
<p>23. Post Collision Condition of Tree or Pole            (For Highest Delta V)            (0) Not collision (for highest delta V) with tree or pole            (1) Not damaged            (2) Cracked/sheared            (3) Tilted <math>&lt; 45</math> degrees            (4) Tilted <math>\geq 45</math> degrees            (5) Uprooted tree            (6) Separated pole from base            (7) Pole replaced            (8) Other (specify):            (9) Unknown</p>		0
<b>24. Rollover</b>		0
<p>(0) No rollover (no overturning)</p>		
<p><i>Rollover (primarily about the longitudinal axis)</i></p>		
<p>(1) Rollover, 1 quarter turn only            (2) Rollover, 2 quarter turns            (3) Rollover, 3 quarter turns            (4) Rollover, 4 or more quarter turns (specify):            _____</p>		
<p>(5) Rollover--end-over-end (i.e., primarily about the lateral axis)            (9) Rollover (overturn), details unknown</p>		
<b>OVERRIDE/UNDERRIDE (THIS VEHICLE)</b>		
<p>25. Front Override/Underride (this Vehicle)</p>		0
<p>26. Rear Override/Underride (this Vehicle)</p>		0
<p>(0) No override/underride, or not an end-to-end impact</p>		
<p><i>Override (see specific CDC)</i></p>		
<p>(1) 1st CDC            (2) 2nd CDC            (3) Other not automated CDC (specify):            _____</p>		
<p><i>Underride (see specific CDC)</i></p>		
<p>(4) 1st CDC            (5) 2nd CDC            (6) Other not automated CDC (specify):            _____</p>		
<p>(7) Medium/heavy truck or bus override            (9) Unknown</p>		
<b>HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V</b>		
<p>Values: (000)-(359) Code actual value            (997) Noncollision            (998) Impact with object            (999) Unknown</p>		
<p>27. Heading Angle For This Vehicle</p>		1 0 5
<p>28. Heading Angle For Other Vehicle</p>		3 2 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)						
I Single Driver	A Right Roadside Departure				04	05	SPECIFICS OTHER SPECIFICS UNKNOWN	
	B Left Roadside Departure				09	10	SPECIFICS OTHER SPECIFICS UNKNOWN	
	C Forward Impact					15	16	SPECIFICS OTHER SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End					(EACH • 32)	(EACH • 33)	SPECIFICS OTHER SPECIFICS UNKNOWN
	E Forward Impact					(EACH • 42)	(EACH • 43)	SPECIFICS OTHER SPECIFICS UNKNOWN
	F Sideswipe Angle				(EACH • 48)	(EACH • 49)	SPECIFICS OTHER SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On			(EACH • 62)	(EACH • 63)	SPECIFICS UNKNOWN		
	H Forward Impact					(EACH • 62)	(EACH • 63)	SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle			(EACH • 66)	(EACH • 67)	SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J. Turn Across Path			INITIAL OPPOSITE DIRECTIONS	INITIAL SAME DIRECTIONS	(EACH • 74)	(EACH • 75)	SPECIFICS OTHER SPECIFICS UNKNOWN
	K. Turn Into Path			TURN INTO SAME DIRECTION			(EACH • 84)	(EACH • 85)
V Increasing Vehicle Damage	L. Straight Paths					(EACH • 90)	(EACH • 91)	SPECIFICS OTHER SPECIFICS UNKNOWN
VI Miscellaneous	M. Backing Etc.			BACKING VEH.	OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

## 29. Basis for Total Delta V (highest)

*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

**COMPUTER GENERATED DELTA V**

Secondary      Highest

## 30. Total Delta V

0 3 5  
(22 mph)35.2 Nearest kph  
(21.9 mph)(NOTE: 000 means less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

## 31. Longitudinal Component of Delta V

0 0 3 4  
(-21 mph)-33.9 Nearest kph  
(-21.1 mph)(NOTE: 000 means greater than -0.5 kph and less than +0.5 kph)  
(±160) ± 159.5 kph and above  
(999) Unknown

	Secondary	Highest
32. Lateral Component of Delta V	<u>0</u> <u>6</u> <u>9</u>	(-06 mph)

-9.2 Nearest kph

(-5.7 mph)

(NOTE: 000 means greater than -0.5 kph and less than +0.5 kph)  
(±160) ± 159.5 kph and above  
(999) Unknown

	Secondary	Highest
33. Energy Absorption	<u>0</u> <u>6</u> <u>3</u> <u>.7</u> 0 0	(46,900-49,400)

63654.5 Nearest 100 joules

(-46,700-47,800)

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

## 34. Confidence In Reconstruction Program Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

## 35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

## 36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES  NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

37. Police Reported Other Drug Presence 6

(0) No other drugs present  
 (1) Yes (other drug present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

### DRUG EVALUATION CLASSIFICATION OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>Ø</u>	41. <u>Ø</u>
Depressant Drug	42. <u>Ø</u>	43. <u>Ø</u>
Stimulant Drug	44. <u>Ø</u>	45. <u>Ø</u>
Hallucinogen Drug	46. <u>Ø</u>	47. <u>Ø</u>
Cannabinoid Drug	48. <u>Ø</u>	49. <u>Ø</u>
Phencyclidine (PCP)	50. <u>Ø</u>	51. <u>Ø</u>
Inhalant Drug	52. <u>Ø</u>	53. <u>Ø</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>Ø</u>	55. <u>Ø</u>

#### Codes For DEC Test Results

(0) No DEC test given  
 (1) Passed DEC test  
 (2) Failed DEC test  
 (3) DEC test given—results unknown  
 (8) No driver present  
 (9) Unknown if DEC test given

#### Codes for Specimen Test Results

(0) No specimen test given  
 (1) Drug not found in specimen  
 (2) Drug found in specimen  
 (7) Specimen test given, results unknown or  
 not obtained  
 (8) No driver present  
 (9) Unknown if specimen test given

38. Police Reported Drug Evaluation Classification Ø

(DEC) Test For Driver  
 (0) No DEC process available or given  
 (1) DEC process given, results known  
 (2) DEC process given, results unknown  
 (3) DEC process available, unknown if given  
 (8) No driver present

39. Other Drug Specimen Test Type For Driver Ø

(0) No specimen test given  
 (1) Blood test  
 (2) Urine test  
 (3) Other specimen tests (specify):  
(7) Unspecified specimen test  
 (8) No driver present  
 (9) Unknown if specimen test given

**OTHER DATA****56. Driver's Zip Code**

(00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

**57. Driver's Race/Ethnic Origin**

(0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**58. Vehicle Special Use (This Trip)**

(0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

**59. Rollover Initiation Type**

(0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type (specify): \_\_\_\_\_  
 (9) Unknown rollover initiation type

**60. Location of Rollover Initiation**

(0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

**61. Rollover Initiation Object Contacted***Ø Ø***62. Location on Vehicle Where Initial Principal Tripping Force Is Applied***Ø*

(0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Underrcarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (8) Non-contact rollover forces (specify): \_\_\_\_\_  
 (9) Unknown

**63. Direction of Initial Roll***Ø*

(0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

**PRECRASH DATA****64. Pre-Event Movement (Prior to Recognition of Critical Event)***1 Ø*

(01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (17) Other (specify): \_\_\_\_\_  
 (98) No driver present  
 (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover

(01-30) — Vehicle Number

### Noncollision

(31) Turn-over — fall-over  
(33) Jackknife

### Collision With Fixed Object

(41) Tree ( $\leq$  10 cm in diameter)  
(42) Tree ( $>$  10 cm in diameter)  
(43) Shrubbery or bush  
(44) Embankment

(45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

(50) Pole or post ( $\leq$  10 cm in diameter)  
(51) Pole or post ( $>$  10 cm but  $\leq$  30 cm in diameter)  
(52) Pole or post ( $>$  30 cm in diameter)  
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object

### Collision with Nonfixed Object

(71) Motor vehicle not in-transport  
(76) Animal  
(77) Train  
(78) Trailer, disconnected in transport  
(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object

## PRECRASH DATA (Continued)

65. Critical Precrash Event 15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

For Corrective Actions Attempted see variable GV14  
(Attempted Avoidance Maneuver)

66. Precrash Stability After Avoidance Maneuver 2

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



**U.S. Department of Transportation  
National Highway Traffic Safety  
Administration**

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number	_____	3. Vehicle Number	<u>62</u>
2. Case Number - Stratum	DSI-93-A8-646		

## VEHICLE IDENTIFICATION

Vehicle Make (specify): FORD      Vehicle Model (specify): TALISER STA. WAGON

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BEAVES R. FRONT BUMPER CORNER	FULL FRONTAL

## **CRUSH PROFILE IN CENTIMETERS**

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>1</u> <u>6</u> <u>6</u> . <u>0</u>	inches x 2.54 =	<u>2</u> <u>6</u> <u>9</u> cm
Overall Length	<u>1</u> <u>9</u> <u>3</u> . <u>1</u>	inches x 2.54 =	<u>4</u> <u>9</u> <u>4</u> cm
Maximum Width	<u>6</u> <u>7</u> <u>1</u> . <u>2</u>	inches x 2.54 =	<u>1</u> <u>8</u> <u>1</u> cm
Curb Weight	<u>2</u> <u>3</u> , <u>2</u> <u>9</u> <u>4</u>	pounds x .4536 =	<u>1</u> , <u>4</u> <u>9</u> <u>4</u> kg
Average Track	<u>6</u> <u>6</u> <u>0</u> . <u>8</u>	inches x 2.54 =	<u>1</u> <u>5</u> <u>4</u> cm
Front Overhang	<u>6</u> <u>4</u> <u>0</u> . <u>4</u>	inches x 2.54 =	<u>1</u> <u>0</u> <u>3</u> cm
Rear Overhang	<u>6</u> <u>4</u> <u>6</u> . <u>7</u>	inches x 2.54 =	<u>1</u> <u>1</u> <u>9</u> cm
Undeformed End Width	<u>6</u> <u>2</u> . <u>0</u>	inches x 2.54 =	<u>1</u> <u>5</u> <u>7</u> cm
Engine Size: cyl./displ.	<u>3</u> <u>0</u> <u>0</u> <u>0</u>	cc x .001 =	<u>3</u> . <u>0</u> L
	<u>1</u> <u>8</u> <u>3</u>	CID x .0164 =	<u>3</u> . <u>0</u> L

## VEHICLE DAMAGE SKETCH

TIRE-WHEEL DAMAGE		ORIGINAL SPECIFICATIONS	WHEEL STEER ANGLES
a. Rotation physically restricted	b. Tire deflated	Wheelbase <u>269</u> cm Overall Length <u>494</u> cm Maximum Width <u>181</u> cm Curb Weight <u>1494</u> kg Average Track <u>154</u> cm Front Overhang <u>103</u> cm Rear Overhang <u>119</u> cm Undeformed End Width <u>157</u> cm Engine Size: cyl./displ. <u>V6/3.0</u> L	(For locked front wheels or displaced rear axles only) RF <input checked="" type="checkbox"/> <u>1</u> <u>0</u> ° LF <input checked="" type="checkbox"/> <u>1</u> <u>0</u> ° RR <input type="checkbox"/> <u>±</u> <u>—</u> ° LR <input type="checkbox"/> <u>±</u> <u>—</u> ° Within $\pm$ 5 degrees
(1) Yes (2) No (8) NA (9) Unk.		DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD	
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		Approximate Cargo Weight <u>68</u> kg ( <u>150</u> )	
<b>GAUGE STANDS AOL</b>  <b>MEASUREMENTS IN CENTIMETERS</b>                                                                                                                                                                                                                                                                            <img alt="Front view of the vehicle showing post-crash dimensions.			



## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>φ 1</u>	5. _____	6. <u>φ 1</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>φ 2</u>

## Second Highest Delta "V"

12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_ 16. \_\_\_\_\_ 17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>1 5 7</u> (62")	<u>φ φ 5</u> (2")	<u>φ φ 5</u> (2")	<u>φ 2 9</u> (12")	<u>φ 5 5</u> (22")	<u>φ 3 φ</u> (12")	<u>φ 2 7</u> (11")	<u>+ φ 3 9</u> (+16")

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
-----	-----	-----	-----	-----	-----	-----	<u>+</u> <u>-</u>

26. Are CDCs Documented but Not Coded on The Automated File?  
 (0) No  
 (1) Yes

φ

27. Researcher's Assessment of Vehicle Disposition  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

1

28. Original Wheelbase Code to the \_\_\_\_\_ nearest centimeter  
 (999) Unknown

2 6 91 4 6 . 4 inches X 2.54 = 2 6 9 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?  
(0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence  
(0) No fire

Yes, fire occurred  
(1) Minor  
(2) Major  
(9) Unknown

31. Origin of Fire  
(0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

(9) Unknown

32. Type of Fuel Tank  
(0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## INTERIOR VEHICLE FORM

### GLAZING

1. Primary Sampling Unit Number \_\_\_\_\_  
2. Case Number - Stratum DSI-93-AB-ΦΦ6  
3. Vehicle Number Φ2

### INTEGRITY

4. Passenger Compartment Integrity ΦΦ  
(00) No integrity loss  
  
Yes, Integrity Was Lost Through  
(01) Windshield  
(02) Door (side)  
(03) Door/hatch (back door)  
(04) Roof  
(05) Roof glass  
(06) Side window  
(07) Rear window (backlight)  
(08) Roof and roof glass  
(09) Windshield and door (side)  
(10) Windshield and roof  
(11) Side and rear window (side window and backlight)  
(12) Windshield and side window  
(13) Door and side window  
(98) Other combination of above (specify):  
  
(99) Unknown

### Door, Tailgate or Hatch Opening

5. LF    6. RF    7. LR    8. RR    9. TG/H     
  
(0) No door/gate/hatch  
(1) Door/gate/hatch remained closed and operational  
(2) Door/gate/hatch came open during collision  
(3) Door/gate/hatch jammed shut  
(8) Other (specify):  
  
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Φ

10. LF Φ 11. RF Φ 12. LR Φ 13. RR Φ 14. TG/H Φ  
  
(0) No door/gate/hatch or door not opened  
  
Door, Tailgate or Hatch Came Open During Collision  
(1) Door operational (no damage)  
(2) Latch/striker failure due to damage  
(3) Hinge failure due to damage  
(4) Door structure failure due to damage  
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage  
(6) Latch/striker and hinge failure due to damage  
(8) Other failure (specify):  
  
(9) Unknown

#### Glazing Damage from Impact Forces

15. WS    16. LF Φ 17. RF Φ 18. LR Φ 19. RR Φ  
20. BL Φ 21. Roof Φ 22. Other Φ

- (0) No glazing damage from impact forces
- (1) Glazing in place and cracked from impact forces
- (2) Glazing in place and holed from impact forces
- (3) Glazing out-of-place (cracked or not) and not holed from impact forces
- (4) Glazing out-of-place and holed from impact forces
- (5) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (8) No glazing
- (9) Unknown if damaged

#### Glazing Damage from Occupant Contact

23. WS Φ 24. LF Φ 25. RF Φ 26. LR Φ 27. RR Φ  
28. BL Φ 29. Roof Φ 30. Other Φ

- (0) No occupant contact to glazing or no glazing
- (1) Glazing contacted by occupant but no glazing damage
- (2) Glazing in place and cracked by occupant contact
- (3) Glazing in place and holed by occupant contact
- (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (5) Glazing out-of-place by occupant contact and holed by occupant contact
- (6) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

If No Glazing Damage And No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As Φ

#### Type of Window/Windshield Glazing

31. WS    32. LF Φ 33. RF Φ 34. LR Φ 35. RR Φ  
36. BL Φ 37. Roof Φ 38. Other Φ

- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 — Laminated
- (2) AS-2 — Tempered
- (3) AS-3 — Tempered-tinted
- (4) AS-14 — Glass/Plastic
- (8) Other (specify):

(9) \_\_\_\_\_

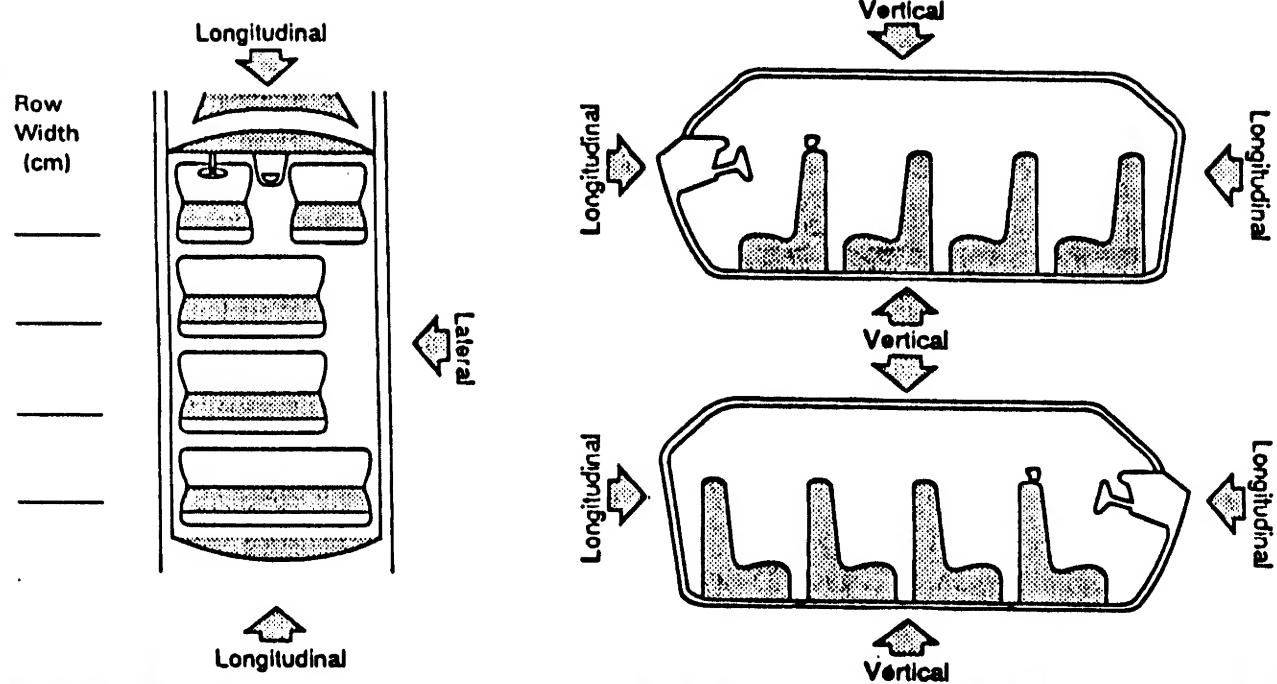
#### Window Precrash Glazing Status

39. WS    40. LF Φ 41. RF Φ 42. LR Φ 43. RR Φ  
44. BL Φ 45. Roof Φ 46. Other Φ

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown

## INTRUSION WORKSHEET

**Note: Sketch intruded areas**



## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Crush Direction	Dominant
1st	47. _____	48. _____	49. _____	50. _____	
2nd	51. _____	52. _____	53. _____	54. _____	
3rd	55. _____	56. _____	57. _____	58. _____	
4th	59. _____	60. _____	61. _____	62. _____	
5th	63. _____	64. <u>①</u> _____	65. _____	66. _____	
6th	67. _____	68. _____	69. _____	70. _____	
7th	71. _____	72. _____	73. _____	74. _____	
8th	75. _____	76. _____	77. _____	78. _____	
9th	79. _____	80. _____	81. _____	82. _____	
10th	83. _____	84. _____	85. _____	86. _____	

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

(97) Catastrophic  
 (98) Other enclosed area (specify)  
 (99) Unknown

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

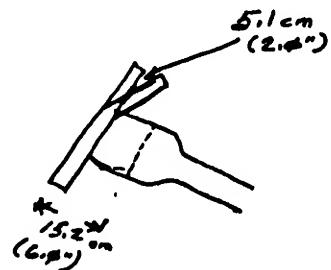
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

15.2 cm (6.0")	-	14.1 cm (4.0")	=	5.1 cm (2.0")
	-		=	
	-		=	
	-		=	



**STEERING COLUMN****87. Steering Column Type**

(1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify):

2

(9) Unknown

**88. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X**89. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**90. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**91. Blank**

(This variable is left blank  
 so that numbering consistency  
 can be maintained with the  
 1988-93 CDS.)

X X X**92. Steering Rim/Spoke Deformation**

Code actual measured

deformation to the nearest centimeter

(00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

0 5**93. Location of Steering Rim/Spoke Deformation**

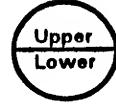
(00) No steering rim deformation

**Quarter Sections**

(01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

0 5**Half Sections**

(05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



(09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

**INSTRUMENT PANEL****94. Odometer Reading**0 5 0,000kilometers—Code to the  
 nearest 1,000 kilometers

(000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

~~0 3 0 8 1 7 miles x 1.6093 = 0 4 9 5 2 4 kilometers~~Source: INSPECTION**95. Instrument Panel Damage from  
 Occupant Contact?**1

(0) No  
 (1) Yes  
 (9) Unknown

**96. Knee Bolsters Deformed from  
 Occupant Contact?**8

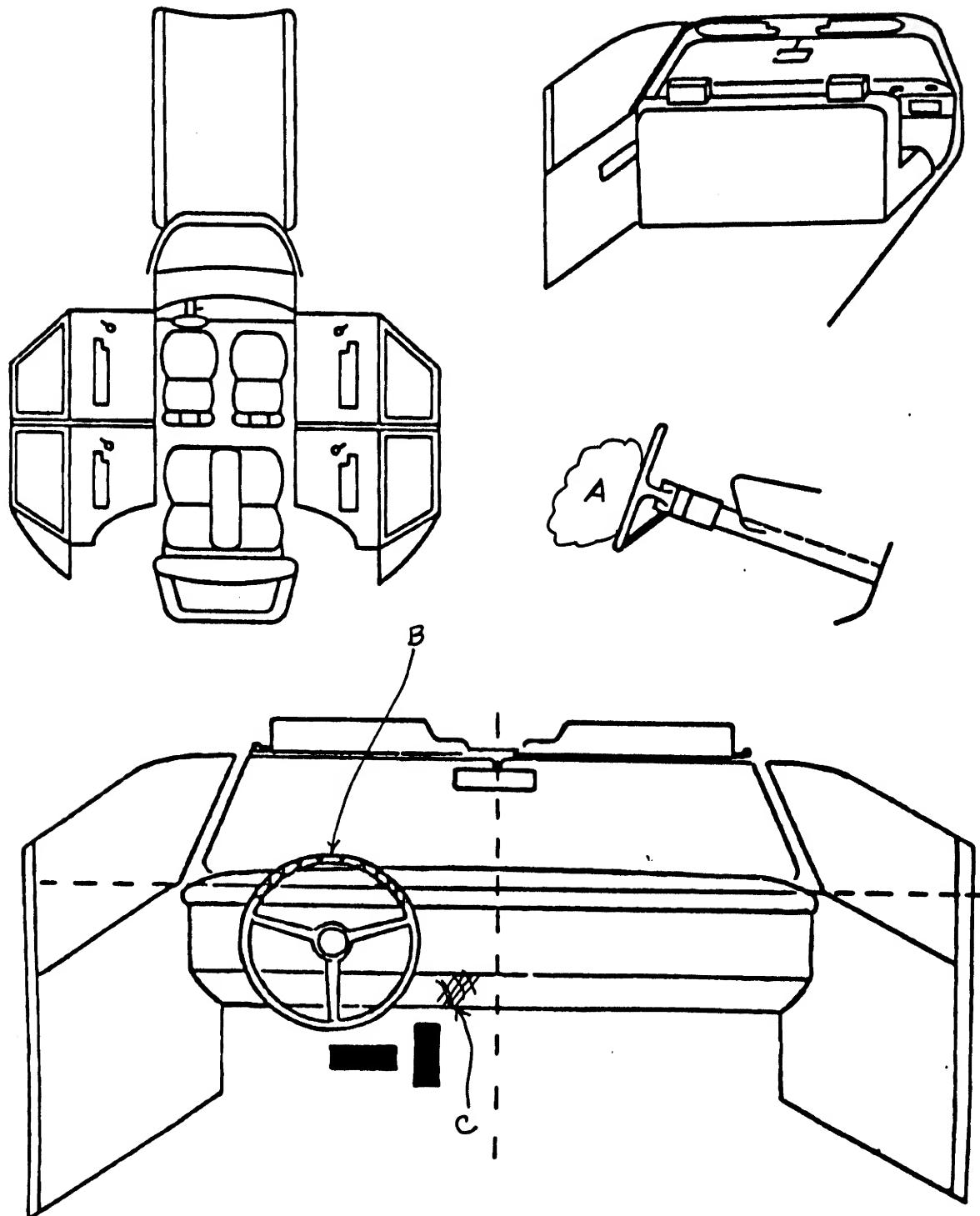
(0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

**97. Did Glove Compartment Door Open  
 During Collision(s)?**0

(0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
Cross hatch contact points, drew spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	45	Ø1	TORSO	AIR BAG DESTROYED	1
B	Ø4	Ø1	HANDS	DEFORMED / ABRASION	
C	Ø9	Ø1	R. KNEE	DEFORMED / ABRASION	
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

(01) Windshield  
 (02) Mirror  
 (03) Sunvisor  
 (04) Steering wheel rim  
 (05) Steering wheel hub/spoke  
 (06) Steering wheel (combination of codes 04 and 05)  
 (07) Steering column, transmission selector lever, other attachment  
 (08) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (09) Left instrument panel and below  
 (10) Center instrument panel and below  
 (11) Right instrument panel and below  
 (12) Glove compartment door  
 (13) Knee bolster  
 (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (16) Driver side air bag compartment cover  
 (17) Passenger side air bag compartment cover  
 (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_  
 (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests  
 (21) Left side hardware or armrest  
 (22) Left A (A1/A2)-pillar

## (23) Left B-pillar

## (24) Other left pillar (specify):

## (25) Left side window glass or frame

## (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

## (27) Other left side object (specify):

## (28) Left side window sill

## RIGHT SIDE

## (30) Right side interior surface, excluding hardware or armrests

## (31) Right side hardware or armrest

## (32) Right A (A1/A2)-pillar

## (33) Right B-pillar

## (34) Other right pillar (specify):

## (35) Right side window glass or frame

## (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

## (37) Other right side object (specify):

## (38) Right side window sill

## INTERIOR

## (40) Seat, back support

## (41) Belt restraint webbing/buckle

## (42) Belt restraint B-pillar attachment point

## (43) Other restraint system component (specify): \_\_\_\_\_

## (44) Head restraint system

## (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

## (46) Other occupants (specify):

## (47) Interior loose objects

## (48) Child safety seat (specify):

## (49) Other interior object (specify): \_\_\_\_\_

## ROOF

## (50) Front header

## (51) Rear header

## (52) Roof left side rail

## (53) Roof right side rail

## (54) Roof or convertible top

## FLOOR

## (56) Floor (including toe pan)

## (57) Floor or console mounted transmission lever, including console

## (58) Parking brake handle

## (59) Foot controls including parking brake

## REAR

## (60) Backlight (rear window)

## (61) Backlight storage rack, door, etc.

## (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

## (1) Certain

## (2) Probable

## (3) Possible

## (9) Unknown

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

## AIR BAGS

		Left	Right
F I R S T	Availability/Function	/	∅
	Deployment	/	∅
	Failure	/	∅

## Air Bag System Availability/Function

(0) Not equipped/not available  
(1) Air bag

## Non-functional

(2) Air bag disconnected (specify):  
(3) Air bag not reinstalled  
(9) Unknown

## Air Bag System Deployment

(0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

## Did Air Bag System Fail?

(0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(9) Unknown

## AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	∅	∅
	Use	∅	∅
	Type	∅	∅
	Proper Use	∅	∅
	Failure Modes	∅	∅

## Automatic (Passive) Belt System Availability/Function

(0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

Non-functional  
(4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

## Automatic (Passive) Belt System Use

(0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

## Automatic (Passive) Belt System Type

(0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

## Proper Use of Automatic (Passive) Belt System

(0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

## Automatic Belt Used Improperly

(3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):  
(9) Unknown

## Automatic (Passive) Belt Failure Modes During Accident

(0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify):

(6) Broken retractor  
(7) Combination of above (specify):  
(8) Other automatic belt failure (specify):  
(9) Unknown

## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F I R S T	Availability	4	3	4
	Use	∅4	∅∅	∅∅
	Failure Modes	1	∅	∅
S E C O N D	Availability	4	3	4
	Use	∅∅	∅∅	∅∅
	Failure Modes	∅	∅	∅
T H I R D	Availability			
	Use			
	Failure Modes			
O T H E R	Availability			
	Use			
	Failure Modes			

### Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

### Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

### (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

### Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown \_\_\_\_\_

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):  
(8) Unknown child safety seat type  
(9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight

  - (01) Rear facing
  - (02) Forward facing
  - (08) Other orientation (specify):  
(09) Unknown orientation

- Designed for Forward Facing for This Age/Weight

  - (11) Rear facing
  - (12) Forward facing
  - (18) Other orientation (specify):  
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):  
(29) Unknown orientation
- (99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

- 4. Child Safety Seat Shield Usage
- 5. Child Safety Seat Tether Usage

**Note: Options Below Are Used for Variables 3-5.**

- (00) No child safety seat

- Not Designed with Harness/Shield/Tether
- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

- Designed With Harness/Shield/Tether
- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

- Unknown If Designed With Harness/Shield/Tether
- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used
- (99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**  
(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R S T	Head Restraint Type/Damage	3	Ø	3
	Seat Type	Ø6	Ø6	Ø6
	Seat Performance	1	8	8
	Seat Orientation	1	1	1
S E C O N D	Head Restraint Type/Damage	Ø	Ø	Ø
	Seat Type	Ø5	Ø5	Ø5
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_
- (9) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: SEAT BACK
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): CARGO
- (7) Combination of above (specify): \_\_\_\_\_

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION      No  Yes

Describe indications of ejection and body parts involved in partial ejection(s):

---



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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection (1) Complete ejection (2) Partial ejection (3) Ejection, Unknown degree (9) Unknown	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): <hr/> (9) Unknown	(5) Integral structure (8) Other medium (specify): <hr/> (9) Unknown
Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear	Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): <hr/>	Medium Status (Immediately Prior to Impact) (1) Open (2) Closed (3) Integral structure (9) Unknown

ENTRAPMENT      No  Yes

Describe entrapment mechanism:

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Component(s):

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(Note in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum DSI-93-AB-ΦΦ6
3. Vehicle Number Φ2
4. Occupant Number Φ1

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 39  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 1  
(1) Male  
(2) Female  
(9) Unknown
7. Occupant's Height 184  
Code actual height to the nearest centimeter.  
(999) Unknown  
  
71 inches  $\times$  2.54 = 184 centimeters
8. Occupant's Weight 673  
Code actual weight to the nearest kilogram.  
(999) Unknown  
  
164 pounds  $\times$  .4536 = 73 kilograms
9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

### 10. Occupant's Seat Position

*Front Seat*

- (11) Left side
- (12) Middle
- (13) Right side
- (14) Other (specify): \_\_\_\_\_
- (15) On or in the lap of another occupant

*Second Seat*

- (21) Left side
- (22) Middle
- (23) Right side
- (24) Other (specify): \_\_\_\_\_
- (25) On or in the lap of another occupant

*Third Seat*

- (31) Left side
- (32) Middle
- (33) Right side
- (34) Other (specify): \_\_\_\_\_
- (35) On or in the lap of another occupant

*Fourth Seat*

- (41) Left side
- (42) Middle
- (43) Right side
- (44) Other (specify): \_\_\_\_\_
- (45) On or in the lap of another occupant

(97) In or on unenclosed area

- (98) Other seat (specify): \_\_\_\_\_
- (99) Unknown

### 11. Occupant's Posture

- (0) Normal posture

*Abnormal posture*

- (1) Kneeling or standing on seat
- (2) Lying on or across seat
- (3) Kneeling, standing or sitting in front of seat
- (4) Sitting sideways or turned to talk with another occupant or to look out a rear window
- (5) Sitting on a console
- (6) Lying back in a reclined seat position
- (7) Bracing with feet or hands on a surface in front of seat
- (8) Other abnormal posture (specify): \_\_\_\_\_

- (9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

(0) No ejection  
(1) Complete ejection  
(2) Partial ejection  
(3) Ejection, unknown degree  
(9) Unknown

6

## 15. Medium Status (Immediately Prior To Impact)

(0) No ejection  
(1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

6

## 13. Ejection Area

(0) No ejection  
(1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear  
(7) Roof  
(8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_  
(9) Unknown

6

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

(0) Not entrapped  
(1) Entrapped  
(9) Unknown

6

## 14. Ejection Medium

(0) No ejection  
(1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):  
\_\_\_\_\_  
(5) Integral structure  
(8) Other medium (specify):  
\_\_\_\_\_  
(9) Unknown

6

## RESTRAINT SYSTEM EVALUATION

## 17. Manual (Active) Belt System Availability

4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

## (8) Other belt (specify):

Unknown

## 18. Manual (Active) Belt System Use

0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

## (02) Shoulder belt

## (03) Lap belt

## (04) Lap and shoulder belt

## (05) Belt used—type unknown

## (08) Other belt used (specify):

## (12) Shoulder belt used with child safety seat

## (13) Lap belt used with child safety seat

## (14) Lap and shoulder belt used with child safety seat

## (15) Belt used with child safety seat—type unknown

## (18) Other belt used with child safety seat

## (specify):

## (99) Unknown if belt used

## 19. Proper Use of Manual (Active) Belts

1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

## (8) Other improper use of manual belt system (specify):

## (9) Unknown

## 20. Manual (Active) Belt Failure Modes

*During Accident*

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

## (6) Broken retractor

## (7) Combination of above (specify):

## (8) Other manual belt failure (specify):

## (9) Unknown

## 21. Air Bag System Availability/Function

1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

## (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

## 22. Air Bag System Deployment

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

## 23. Are There Indications of Air Bag System Failure?

1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

## (9) Unknown

**Note:** See Variables 44 through 48 (Page 5) for Information on Automatic Belts

## 24. Police Reported Restraint Use

4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify):

## (8) Restrained, type unknown

## (9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

## 25. Head Restraint Type/Damage by Occupant at This Occupant Position

3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

## 26. Seat Type (this Occupant Position)

06

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>∅ ∅ ∅</u></p> <p>(000) No child safety seat  Applicable codes are found in your NASS CDS Data Collection, Coding and Editing  (950) Built-in child safety seat  (997) Other make/model (specify):    (998) Unknown make/model  (999) Unknown if child safety seat used</p>	<p>31. Child Safety Seat Harness Usage <u>∅ ∅</u></p> <p>32. Child Safety Seat Shield Usage <u>∅ ∅</u></p> <p>33. Child Safety Seat Tether Usage <u>∅ ∅</u></p> <p>Note: Options below applicable to Variables OA31-OA33.</p> <p>(00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>∅</u></p> <p>(0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):    (8) Unknown child safety seat type  (9) Unknown if child safety seat used</p>	<p><i>Not Designed With Harness/Shield/Tether</i>  (01) After market harness/shield/tether added, not used  (02) After market harness/shield/tether used  (03) Child safety seat used, but no after market harness/shield/tether added  (09) Unknown if harness/shield/tether added or used</p> <p><i>Designed With Harness/Shield/Tether</i>  (11) Harness/shield/tether not used  (12) Harness/shield/tether used  (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>∅ ∅</u></p> <p>(00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i>  (01) Rear facing  (02) Forward facing  (08) Other orientation (specify):    (09) Unknown orientation</p> <p><i>Designed For Forward Facing for This Age/Weight</i>  (11) Rear facing  (12) Forward facing  (18) Other orientation (specify):    (19) Unknown orientation</p> <p><i>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight</i>  (21) Rear facing  (22) Forward facing  (28) Other orientation (specify):    (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i>  (21) Harness/shield/tether not used  (22) Harness/shield/tether used  (29) Unknown if harness/shield/tether used</p>

**INJURY CONSEQUENCES****34. Injury Severity (Police Rating)**

(0) O - No injury  
 (1) C - Possible injury  
 (2) B - Nonincapacitating injury  
 (3) A - Incapacitating injury  
 (4) K - Killed  
 (5) U - Injury, severity unknown  
 (6) Died prior to accident  
 (9) Unknown

3**35. Treatment - Mortality**

(0) No treatment  
 (1) Fatal  
 (2) Fatal - ruled disease (specify):  
 \_\_\_\_\_

4*Nonfatal*

(3) Hospitalization  
 (4) Transported and released  
 (5) Treatment at scene - nontransported  
 (6) Treatment later  
 (8) Treatment - other (specify):  
 \_\_\_\_\_

(9) Unknown**36. Type Of Medical Facility (for Initial Treatment)**2

(0) Not treated at a medical facility  
 (1) Trauma center  
 (2) Hospital  
 (3) Medical clinic  
 (4) Physician's office  
 (5) Treatment later at medical facility  
 (8) Other (specify):  
 \_\_\_\_\_

(9) Unknown**37. Hospital Stay**φ φ

(00) Not Hospitalized  
 \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.  
 (61) 61 days or more  
 (99) Unknown

**99. Case Occupant**1

(0) Not the Case Occupant  
 (1) This is the Case Occupant  
 (2) This is the Case Occupant in another case.

**38. Working Days Lost**φ 7

\_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident  
 (00) No working days lost  
 (61) 61 days or more  
 (62) Fatally injured  
 (97) Not working prior to accident  
 (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER****39. Time to Death**φ φ

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

**40. 1st Medically Reported Cause of Death**φ φ**41. 2nd Medically Reported Cause of Death**φ φ**42. 3rd Medically Reported Cause of Death**φ φ

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
 (97) Other result (includes fatal ruled disease) (specify):  
 (99) Unknown

**43. Number of Recorded Injuries for This Occupant**φ 2

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**

44. Automatic (Passive) Belt System Availability/ 0  
**Function**  
 (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

**Non-functional**

(4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use 0  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type 0  
 (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0  
 (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat  
  
**Automatic Belt Used Improperly**  
 (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
  
 (8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0  
 (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
  
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 9 7  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

51. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 9 7  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO  YES

UPDATE CANDIDATE?

NO  YES



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

Form Approved  
O.M.B. No. 2127-0021

## OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	2. Case Number - Stratum	3. Vehicle Number	4. Occupant Number
	DSI-93-AB-006	42	01

### INJURY DATA

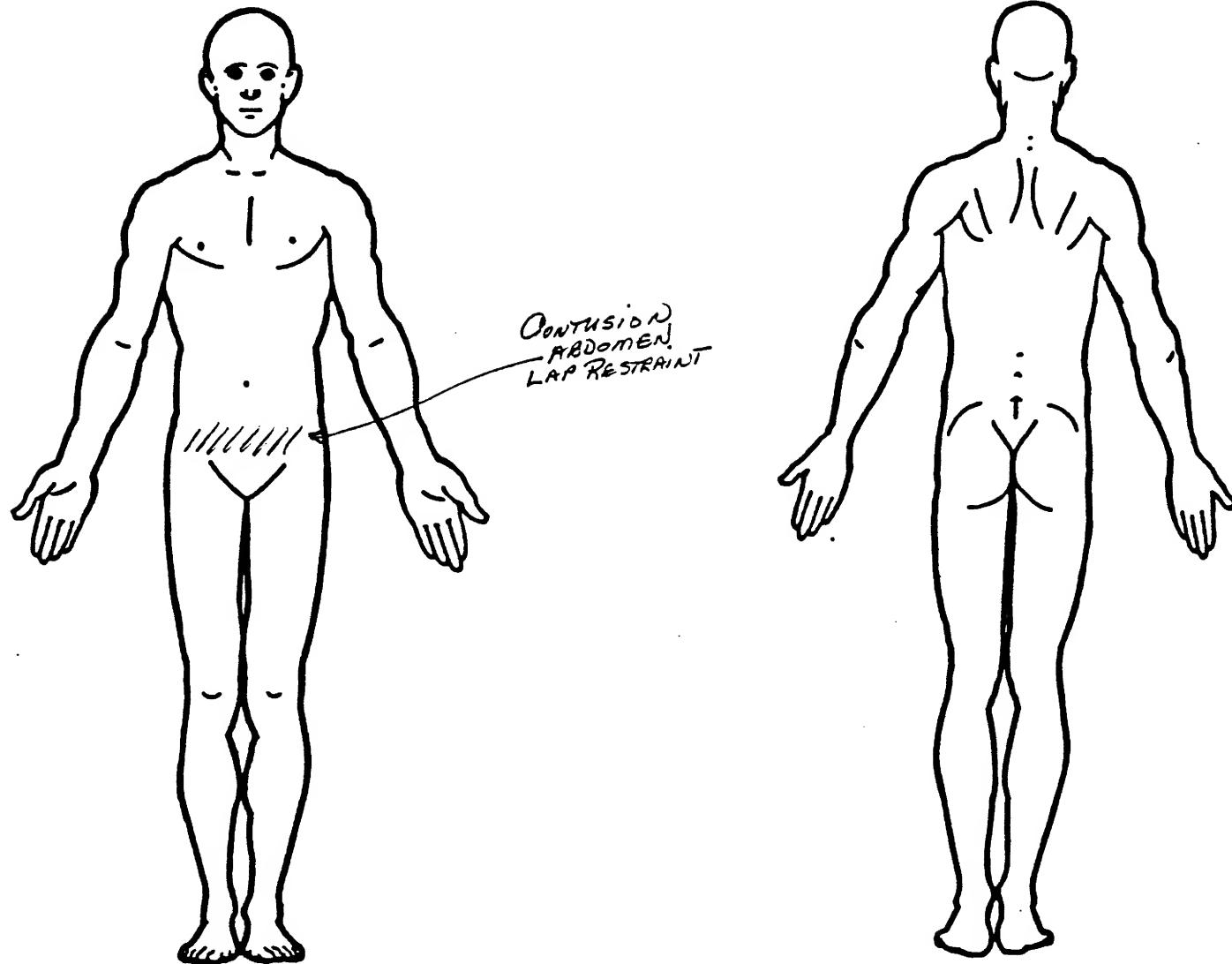
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	O.I.C.-A.I.S						Injury Source Confidence Level	Occupant Area Intrusion Number	ICD-9			
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
1st	5. 1	6. 7	7. 5	8. 22	9. 00	10. 2	11. 2	12. 41	13. 1	14. 1	15. 00	810.00
2nd	16. 1	17. 5	18. 9	19. 04	20. 02	21. 1	22. 4	23. 41	24. 1	25. 1	26. 00	922.2
3rd	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	
4th	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.	
5th	49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.	
6th	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.	
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.	
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.	
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.	

## OCCUPANT INJURY DATA

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**SOURCE OF INJURY DATA****OFFICIAL**

(1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL**

(5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):

(9) Police

**INJURY SOURCE****FRONT**

(01) Windshield  
 (02) Mirror  
 (03) Sunvisor  
 (04) Steering wheel rim  
 (05) Steering wheel hub/spoke  
 (06) Steering wheel (combination of codes 04 and 05)  
 (07) Steering column, transmission selector lever, other attachment  
 (08) Add on equipment (e.g., CB, tape deck, air conditioner)  
 (09) Left instrument panel and below  
 (10) Center instrument panel and below  
 (11) Right instrument panel and below  
 (12) Glove compartment door  
 (13) Knee bolster  
 (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (16) Driver side air bag compartment cover  
 (17) Passenger side air bag compartment cover  
 (18) Windshield reinforced by exterior object (specify):  
 (19) Other front object (specify):

**LEFT SIDE**

(20) Left side interior surface, excluding hardware or armrests  
 (21) Left side hardware or armrest  
 (22) Left A (A1/A2)-pillar  
 (23) Left B-pillar  
 (24) Other left pillar (specify):

(25) Left side window glass or frame  
 (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (27) Other left side object (specify):

(28) Left side window sill

**RIGHT SIDE**

(30) Right side interior surface, excluding hardware or armrests  
 (31) Right side hardware or armrest  
 (32) Right A (A1/A2)-pillar  
 (33) Right B-pillar  
 (34) Other right pillar (specify):

(35) Right side window glass or frame  
 (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

(37) Other right side object (specify):

(38) Right side window sill

**INTERIOR**

(40) Seat, back support  
 (41) Belt restraint webbing/buckle  
 (42) Belt restraint B-pillar or door frame attachment point  
 (43) Other restraint system component (specify):  
 (44) Head restraint system  
 (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)  
 (46) Other occupante (specify):  
 (47) Interior loose objects  
 (48) Child safety seat (specify):  
 (49) Other interior object (specify):

**ROOF**

(50) Front header  
 (51) Rear header  
 (52) Roof left side rail  
 (53) Roof right side rail  
 (54) Roof or convertible top

**FLOOR**

(56) Floor (including toe pan)  
 (57) Floor or console mounted transmission lever, including console  
 (58) Parking brake handle  
 (59) Foot controls including parking brake

**REAR**

(60) Backlight (rear window)

(61) Backlight storage rack, door, etc.  
 (62) Other rear object (specify):

**EXTERIOR OF OCCUPANT'S VEHICLE**

(66) Hood  
 (68) Outside hardware (e.g., outside mirror, antenna)  
 (67) Other exterior surface or tire (specify):  
 (68) Unknown exterior objects

**EXTERIOR OF OTHER MOTOR VEHICLE**

(70) Front bumper  
 (71) Hood edge  
 (72) Other front of vehicle (specify):

(73) Hood  
 (74) Hood ornament  
 (76) Windshield, roof rail, A-pillar  
 (76) Side surface  
 (77) Side mirror  
 (78) Other side protrusions (specify):

(79) Rear surface  
 (80) Undercarriage  
 (81) Tires and wheels  
 (82) Other exterior of other motor vehicle (specify):

(83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

(84) Ground  
 (85) Other vehicle or object (specify):

(86) Unknown vehicle or object

**NONCONTACT INJURY**

(90) Fire in vehicle  
 (91) Flying glass  
 (92) Other noncontact injury source (specify):  
 (93) Air bag exhaust gases  
 (97) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

(1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**DIRECT/INDIRECT INJURY**

(1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source

**OCCUPANT INJURY CLASSIFICATION****Body Region**

(1) Head  
 (2) Face  
 (3) Neck  
 (4) Thorax  
 (5) Abdomen  
 (6) Spine  
 (7) Upper Extremity  
 (8) Lower Extremity  
 (9) Unspecified

**Type of Anatomic Structure**

(1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (9) Skin

**Specific Anatomic Structure**

**Whole Area**  
 (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (90) Trauma, other than mechanical

**Head - LOC**

(02) Length of LOC  
 (04, 06, 08) Level of Consciousness  
 (10) Concussion

**Spine**

(02) Cervical  
 (04) Thoracic  
 (06) Lumbar

**Vessels, Nerves, Organs, Bones, Joints**

are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

(1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (6) Critical Injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

**Aspect**

(1) Right  
 (2) Left  
 (3) Bilateral  
 (4) Central  
 (6) Anterior  
 (6) Posterior  
 (7) Superior  
 (8) Inferior  
 (9) Unknown  
 (0) Whole region

## OFFICIAL INJURY DATA – SKELETAL INJURIES

Restrained?

No

Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS = 99

Units of Blood Given

Units = 0

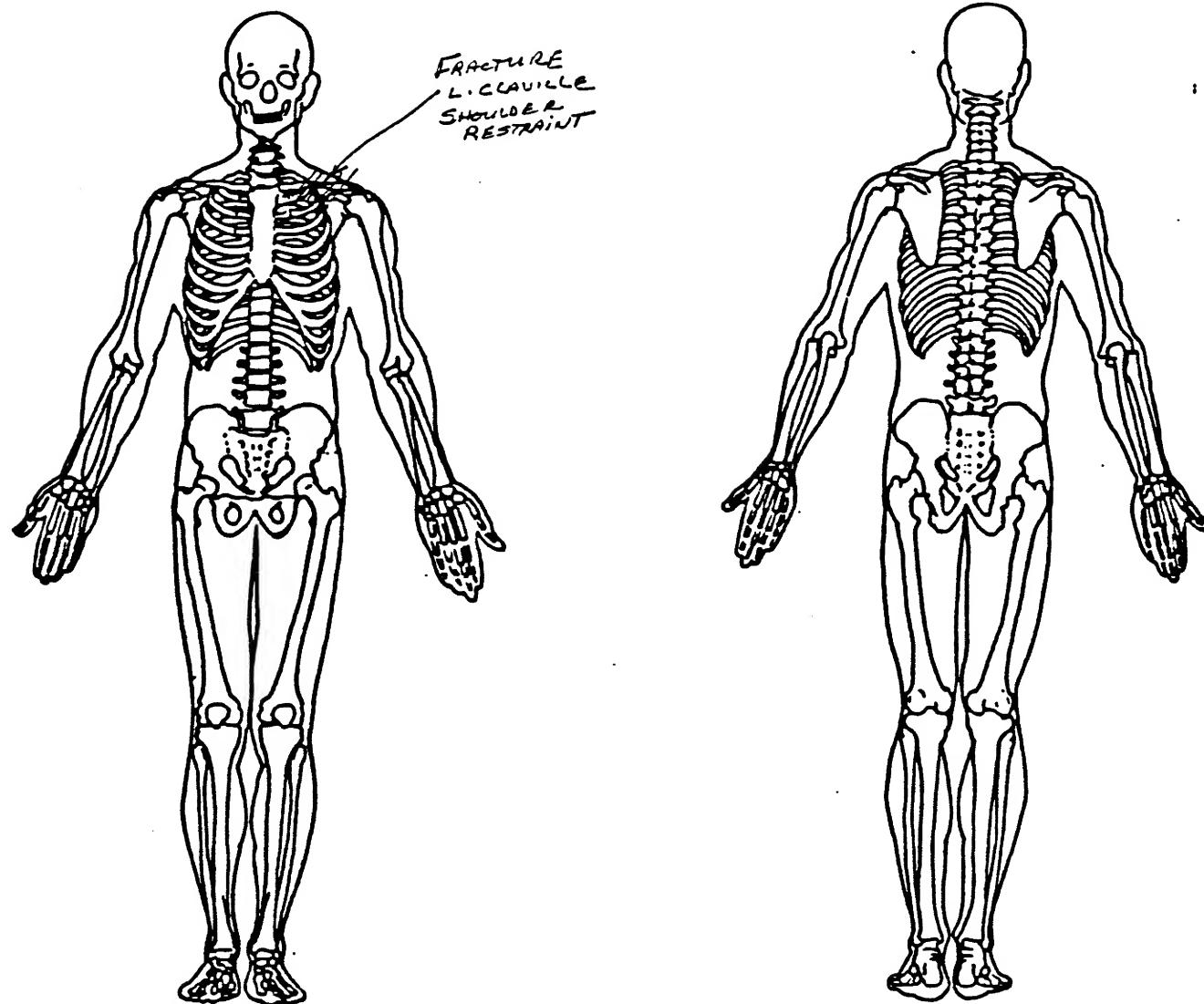
Arterial Blood Gases

pH = 7.4

PO<sub>2</sub> = 400

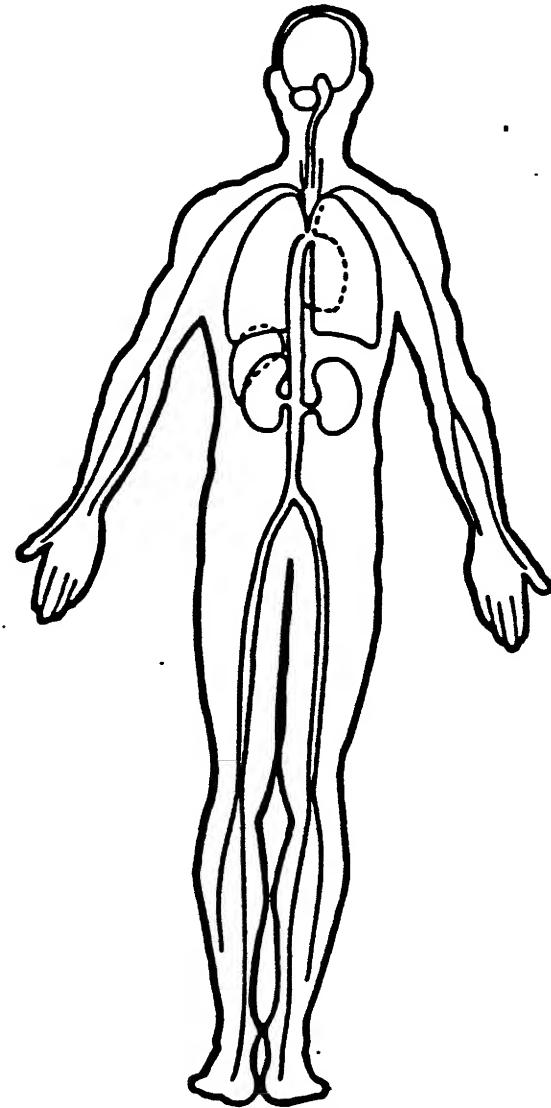
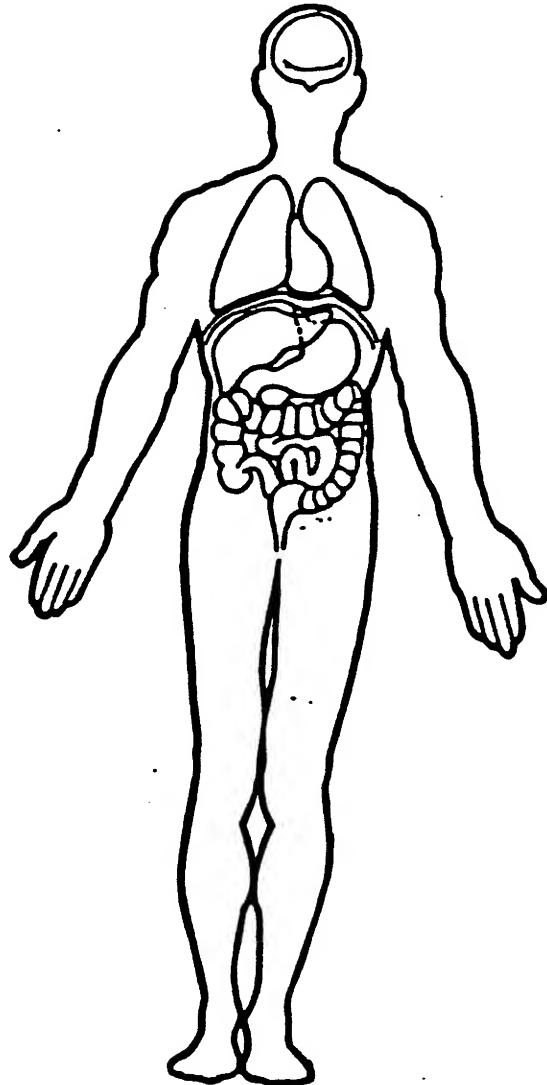
PCO<sub>2</sub> = 35

HCO<sub>3</sub> = 24



## OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

## CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL(KPH)	LONG.(KPH)	LAT.(KPH)	ANG.(DEG)
	VEH #2	37.6	-37.5	2.0	-3.0
		35.2	-34.0	-9.1	15.0

ENERGY DISSIPATED BY DAMAGE VEH#1:107231.8 JOULES VEH#2: 63663.9 JOULES

SUMMARY OF DAMAGE DATA  
VEHICLE # 1(\* INDICATES DEFAULT VALUE)  
VEHICLE # 2

TYPE-----CATEGORY 3	TYPE-----CATEGORY 3
STIFFNESS---CATEGORY 9	STIFFNESS---CATEGORY 3
WEIGHT----- 1540.0 KGS	WEIGHT----- 1642.0 KGS
CDC-----12FYEW3	CDC-----01FZEW2
L----- 152.4 CM.	L----- 157.5 CM.
C1----- 60.7 CM.	C1----- 5.6 CM.
C2----- 77.0 CM.	C2----- 5.6 CM.
C3----- 51.3 CM.	C3----- 29.2 CM.
C4----- 36.1 CM.	C4----- 54.9 CM.
C5----- 24.4 CM.	C5----- 29.5 CM.
C6----- 20.6 CM.	C6----- 27.2 CM.
D----- -38.1 CM.	D----- 39.4 CM.
RHO----- 1.00 *	RHO----- 1.00 *
ANG----- -3.0 DEG.	ANG----- 15.0 DEG.
D'----- -55.4 CM.	D'----- 56.1 CM.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 130.3 CM.	A2 = 130.3 CM.
B1 = 141.0 CM.	B2 = 141.0 CM.
TR1 = 149.6 CM.	TR2 = 149.6 CM.
I1 = 331504.9 NEWT-SEC**2-CM	I2 = 353475.1 NEWT-SEC**2-CM
M1 = 15.458 NEWT-SEC**2/CM	M2 = 16.483 NEWT-SEC**2/CM
XP1 = 228.1 CM.	XP2 = 228.1 CM.
XR1 = -270.3 CM.	XR2 = -270.3 CM.
YS1 = 92.2 CM.	YS2 = 92.2 CM.

## SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

## CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL(MPH)	LONG.(MPH)	LAT.(MPH)	ANG.(DEG)
	VEH #2	23.3	-23.3	1.2	-3.0
		21.9	-21.1	-5.7	15.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 79079.5 FT-LB VEH#2: 46949.8 FT-LB

SUMMARY OF DAMAGE DATA		(* INDICATES DEFAULT VALUE)	
VEHICLE # 1		VEHICLE # 2	
TYPE-----	CATEGORY 3	TYPE-----	CATEGORY 3
STIFFNESS--	CATEGORY 9	STIFFNESS--	CATEGORY 3
WEIGHT-----	3395.0 LBS.	WEIGHT-----	3620.0 LBS.
CDC-----	12FYEW3	CDC-----	01FZEW2
L-----	60.0 IN.	L-----	62.0 IN.
C1-----	23.9 IN.	C1-----	2.2 IN.
C2-----	30.3 IN.	C2-----	2.2 IN.
C3-----	20.2 IN.	C3-----	11.5 IN.
C4-----	14.2 IN.	C4-----	21.6 IN.
C5-----	9.6 IN.	C5-----	11.6 IN.
C6-----	8.1 IN.	C6-----	10.7 IN.
D-----	-15.0	D-----	15.5
RHO-----	1.00 *	RHO-----	1.00 *
ANG-----	-3.0 DEG.	ANG-----	15.0 DEG.
D'-----	-21.8 IN.	D'-----	22.1 IN.

## DIMENSIONS AND INERTIAL PROPERTIES

A1	=	51.3	IN.	A2	=	51.3	IN.
B1	=	55.5	IN.	B2	=	55.5	IN.
TR1	=	58.9	IN.	TR2	=	58.9	IN.
I1	=	29342.1	LB-SEC**2-IN	I2	=	31286.7	LB-SEC**2-IN
M1	=	8.827	LB-SEC**2/IN	M2	=	9.412	LB-SEC**2/IN
XF1	=	89.8	IN.	XF2	=	89.8	IN.
XR1	=	-106.4	IN.	XR2	=	-106.4	IN.
YS1	=	36.3	IN.	YS2	=	36.3	IN.



# CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

## Identifying Title

Primary Sampling Unit

Case No.-Stratum

φ 1  
Accident Event Sequence No.

9 3  
Date (Month, day, year) of Run

## CRASHPC Vehicle Identification

Vehicle 1	1993	PLYMOUTH	ACCLAIM	φ 1
Vehicle 2	1992	FOCUS	TAURUS	φ 2
	Year	Make	Model	NASS Veh. No.

## GENERAL INFORMATION

### VEHICLE 1

Size 3  
Weight  
1263 + 277 + φ = 154φ kg  
Curb Occupant(s) Cargo  
CDC 12 F Y E W 3  
PDOF (-180 to +180) 0 φ φ 3 °  
Stiffness 9

### VEHICLE 2

Size 3  
Weight  
1494 + 8φ + 68 = 1642 kg  
Curb Occupant(s) Cargo  
CDC φ1 F φ E W 2  
PDOF (-180 to +180) 0 φ1 5 °  
Stiffness 3

## SCENE INFORMATION

Rest and Impact Positions  No, Go To Damage Information  Yes

### VEHICLE 1

Rest Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Impact Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Slip Angle (-180 to +180) \_\_\_\_\_ °

### VEHICLE 2

Rest Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Impact Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Slip Angle (-180 to +180) \_\_\_\_\_ °

## VEHICLE MOTION

Sustained Contact  No  Yes

### VEHICLE 1

Skidding (Rotation)  No  Yes  
Skidding Stop Before Rest  No  Yes  
End of Rotation Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Curved Path  No  Yes  
Point on Path X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

### VEHICLE 2

Skidding (Rotation)  No  Yes  
Skidding Stop Before Rest  No  Yes  
End of Rotation Position X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °  
  
Curved Path  No  Yes  
Point on Path X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Rotation Direction  None  CW  CCW  
Rotation > 360°  No  Yes

Rotation Direction  None  CW  CCW  
Rotation > 360°  No  Yes

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

**FRICITION INFORMATION**

Coefficient of Friction . \_\_\_\_\_  
Rolling Resistance Option \_\_\_\_\_

**Vehicle 1 Rolling Resistance**

LF \_\_\_\_ . \_\_\_\_ RF \_\_\_\_ . \_\_\_\_  
LR \_\_\_\_ . \_\_\_\_ RR \_\_\_\_ . \_\_\_\_

**Vehicle 2 Rolling Resistance**

LF \_\_\_\_ . \_\_\_\_ RF \_\_\_\_ . \_\_\_\_  
LR \_\_\_\_ . \_\_\_\_ RR \_\_\_\_ . \_\_\_\_

**TRAJECTORY INFORMATION**

Trajectory Data  No  Yes  
If No, Go To Damage Information

**Vehicle 1 Steer Angles**

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

**Vehicle 2 Steer Angles**

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary  No  Yes

**First Point**

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

**Second Point**

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Secondary Coefficient of Friction . \_\_\_\_\_

**DAMAGE INFORMATION**

**VEHICLE 1**

Damage Length L 1 5 2 cm

Crush Depths

C<sub>1</sub> Ø 6 1 cm  
C<sub>2</sub> Ø 7 7 cm  
C<sub>3</sub> Ø 5 1 cm  
C<sub>4</sub> Ø 3 6 cm  
C<sub>5</sub> Ø 2 4 cm  
C<sub>6</sub> Ø 2 1 cm

Damage Offset D Ø 3 8 cm

**VEHICLE 2**

Damage Length L 1 5 8 cm

Crush Depths

C<sub>1</sub> Ø 6 6 cm  
C<sub>2</sub> Ø 6 6 cm  
C<sub>3</sub> Ø 2 9 cm  
C<sub>4</sub> Ø 5 5 cm  
C<sub>5</sub> Ø 3 6 cm  
C<sub>6</sub> Ø 2 7 cm

Damage Offset D Ø 3 9 cm

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information  
for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

AIRBAG SUPPLEMENT

1

## ACCIDENT SUMMARY

1. Accident Date: [REDACTED] 3

2. Police Investigated

(1) Yes  
(2) No  
(3) Unknown

Agency: [REDACTED]

City: [REDACTED]

County: [REDACTED] MD.

3. General Locality

(1) Freeway, Limited Access  
(2) Urban (City)  
(3) Urban-Rural (mixed)  
(4) Rural, Fields

4. Configuration (First Harm)

(0) Struck Object or Ped  
(1) Rear-End  
(2) Head-On  
(3) Rear-to-Rear  
(4) Angle  
(5) Sideswipe-Same Direction  
(6) Sideswipe-Opposite Dir.  
(7) Noncollision  
(8) Nonimpact Deployment  
(9) Unknown

5. Fire Involved

(0) None  
(1) Airbag Vehicle  
(2) Other Vehicle  
(3) Both Vehicles  
(9) Unknown

6. Vehicles Involved

1

7. Persons Involved

2

8. Injured Persons

5

5

9.

## AIRB

10. Date Vehicle Inspected: [REDACTED] 93

11. Reason Vehicle Note Inspected

(0) Not Required  
(1) Inspection Completed  
(2) Cannot be Located  
(3) Repaired or Destroyed  
(5) Refusal or Impounded  
(7) Other:

12. Impact Data Obtained

(0) No Data Obtained  
(1) CDC Only  
(2) Crush Profile Only  
(3) Trajectory Data Only  
(4) CDC and Crush Profile  
(5) CDC and Trajectory  
(6) Crush and Trajectory  
(7) CDC, Crush, and Trajectory

13. Basis of Delta-v

(0) Not Computed (Unknown why)  
(1) CRASH - Damage Only  
(2) CRASH - Damage + Traj  
(3) OLDMISS  
(4) POLES  
(5) Unknown Basis  
(6) One Vehicle Beyond Scope  
(7) Collision Beyond Scope  
(8) Insufficient Data

## VEHICLE HISTORY

14. Prior Impacts for AB Vehicle?

(1) Yes  
(2) No  
(9) Unknown

15. Prior AB Maintenance or Service

(1) Yes, (2) No, (9) Unknown

Describe:

**AIRBAG SUPPLEMENT**

2

**AIRBAG VEHICLE**

Fleet: NONE  
 VIN: 1P3XA46K2PF  
 Mileage: 39154 Km  
(24,334 mi.)

**SYSTEM READINESS LAMP**

16. Pre-Impact Lamp Condition  1  
 (1) Functioning/Proved Out  
 (2) Inoperative  
 (9) Unknown

17. Driver's Report of Pre-Impact Flashing    
 (00) No Flashing Reported  
 (01) Continuous Flashing  
 (02)

Number of Flashes: \_\_\_\_\_  
 (11)  
 (12) Constant Light  
 (19) Flashing, Unknown Number  
 (88) Not Applicable, System Removed  
 (99) Unknown

18. Period of Pre-Impact Flashing    
 (0) No Flashing  
 (1) Same Day as Impact  
 (2) Prior Day  
 (3) Prior Two Days  
 (4) Prior Week  
 (5) Prior Month  
 (6) Over One Month  
 (9) Unknown

19. Post-Impact Lamp Condition  2  
 (1) Functioning/Proved Out  
 (2) Inoperative  
 (9) Unknown

20. Post-Impact Flashing    
 (00) No Flashing Reported  
 (01) Continuous Flashing  
 (02)  
 Number of Flashes: \_\_\_\_\_  
 (11)  
 (12) Constant Light  
 (19) Flashing, Unknown Number  
 (88) Not Applicable, System Removed  
 (99) Unknown

**Airbag Vehicle First Harmful Event** 13

(01) Fire or explosion  
 (02) Immersion  
 (03) Gas Inhalation  
 (04) Fell from vehicle  
 (05) Injured in vehicle  
 (06) Other noncollision (specify):

(07) Overturn

(08) Jackknife

**COLLISION WITH:**

(09) Pedestrian  
 (10) Pedalcyclist  
 (11) Railway train  
 (12) Animal  
 (13) Motor vehicle in transport  
 (same roadway)  
 (14) Motor vehicle in transport  
 (other roadway)

(15) Parked motor vehicle  
 (16) Other type nonmotorist (specify):  
 (17) Thrown or falling object

(18) Boulder

**COLLISION WITH FIXED OBJECT**

(20) Building  
 (21) Impact attenuator/crash cushion  
 (22) Bridge pier or abutment  
 (23) Bridge parapet end  
 (24) Bridge rail  
 (25) Guardrail  
 (26) Concrete traffic barrier  
 (27) Median barrier  
 (28) Other longitudinal barrier (specify):  
 (29) Highway/traffic sign post  
 (30) Overhead sign support  
 (31) Luminaire/light support  
 (32) Utility pole  
 (33) Other post, pole, or support  
 (34) Culvert  
 (35) Curb  
 (36) Ditch  
 (37) Embankment-earth  
 (38) Embankment-rock, stone, or concrete  
 (39) Fence  
 (40) Wall  
 (41) Fire hydrant  
 (42) Shrubbery  
 (43) Tree  
 (44) Other fixed object (specify):  
 (45) Pavement surface irregularity  
 (99) Unknown

**AIRBAG SUPPLEMENT****3****AIRBAG VEHICLE IMPACT SUMMARY**

22. Vehicle Role  
 (0) Noncollision  
 (1) Striking unit  
 (2) Struck unit  
 (3) Both striking and struck  
 (9) Unknown

**3**

23. Manner of Leaving Scene  
 (1) Driven  
 (2) Towed-due to damage  
 (3) Towed-not for damage  
 (4) Towed-details unknown  
 (5) Abandoned  
 (9) Unknown

**2**

24. Number of Impact Events  
 (8) 8 or more  
 (9) Unknown

**1**

25. Rollover  
 (0) No rollover  
 (1) First event  
 (2) Subsequent event  
 (3) Yes, Unknown event  
 (9) Unknown

**0**

26. Override/Underride  
 (0) No override/underride  
 (1) Override - 1st CDC  
 (2) Override - Other CDC  
 (3) Underride - 1st CDC  
 (4) Underride - Other CDC  
 (9) Unknown

**0****AIRBAG VEHICLE DAMAGE**  
CODES: (1) Yes, (2) No, (9) Unknown

27. Left Front Fender Damage

**1**

28. Right Front Fender Damage

**1**

29. Center Top of Grille Damage

**1****FRONT BUMPER E.A. STATUS**

30. Left  
 (1) Normal  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

**4**

31. Right  
 (1) Normal  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

**3****FIRST AIRBAG VEHICLE IMPACT:**

32. Configuration

**2**

(0) Struck Object or Ped  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe-Same Direction  
 (6) Sideswipe-Opposite Dir.  
 (7) Noncollision  
 (8) Nonimpact Deployment  
 (9) Unknown

33. CDC: 12 FYEW 3

34. Object Contacted: 1992 FORD TAURUS STA.WAG.

**PRIMARY/DEPLOYMENT IMPACT:**

35. Event Number

**1**

36. Total Delta-V (KPH)

**38**

37. Longitudinal Delta-V (KPH)

**-38**

38. Configuration

**2**

See 32 above for codes

39. CDC: 12 FYEW 3

40. Object Contacted: 1992 FORD TAURUS STA.WAG.

**AIRBAG SUPPLEMENT****AIRBAG SYSTEM DAMAGE**

CODES: (1) Yes, Damaged  
 (2) No, Intact  
 (3) Not Applicable  
 (9) Unknown

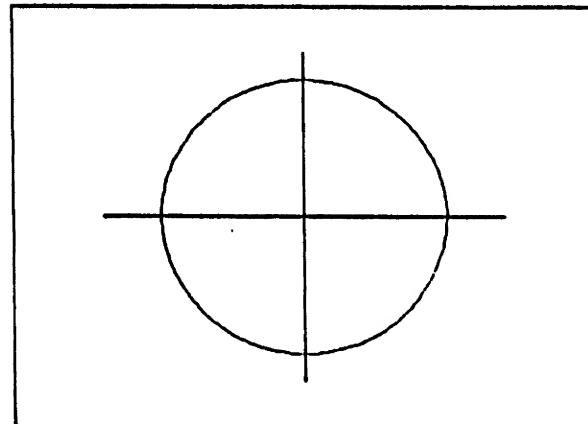
41. Airbag Module	<input type="text" value="2"/>
42. Left Front Sensor	<input type="text" value="1"/>
43. Center Front Sensor	<input type="text" value="9"/>
44. Right Front Sensor	<input type="text" value="2"/>
45. Rear Cowl Sensor	<input type="text" value="9"/>
46. Diagnostic Module	<input type="text" value="2"/>
47. Wiring	<input type="text" value="2"/>
48. Knee Diverter	<input type="text" value="3"/>
49. Indication of disconnected or loose electrical connectors	<input type="text" value="2"/>
50. Condition of Deployed Bag	<input type="text" value="1"/>
	(1) Bag intact (2) Split or torn (3) Cut by object in impact (4) Cut after accident (5) Other (8) NA (not deployed) (9) Unknown

**DESCRIBE SYSTEM AND BAG DAMAGE:**

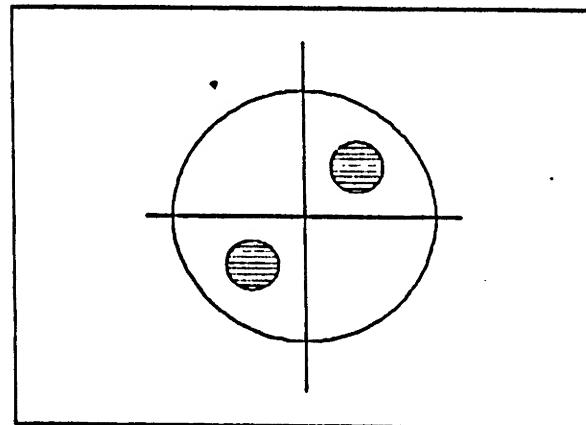
*LF Sensor damaged by impact.*

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

FRONT



BACK



AIRBAG SUPPLEMENT

5

## OCCUPANTS OF AIRBAG CAR

51. Number of Occupants in Vehicle

4

52. Number of Injured Persons

4

53. Maximum AIS in Airbag Vehicle

- (0) No Injury
- (1-6) AIS Severity
- (7) Injured, unknown severity
- (9) Unknown

3

## DRIVER

Age: 45Sex: MALE

54. Number of Driver Injuries

2

55. Source of Best Injury Data

- (0) Not injured
- (1) Autopsy
- (2) Hospital Medical Records
- (3) Emergency Room only
- (4) Private physician, clinic
- (5) Lay Coroner Report
- (6) EMS Personnel
- (7) Interviewee
- (8) Police
- (9) Unknown

2

## MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	_____	_____
Chest	_____	_____
Abdomen	_____	_____
Legs/Hips	<u>2</u>	<u>69</u>
Other (Arms)	<u>1</u>	<u>64</u>
Driver Maximum	<u>2</u>	<u>69</u>

## EJECTION

Extent: N/APortal: N/A

## OTHER VEHICLE:

Maximum AIS

2Prime/Deploy Impact w AB Vehicle  
Event Number1CDC: 01FREW2

Total Delta V (KPH)

35Make: FORDModel Year: 1992Model: TAURUSBody Type: STATION WAGON

## NOTES:

AIRBAG SUPPLEMENT

6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown 2

Evidence: SEAT BELT INSPECTION, OCCUPANT CONTACT POINTS

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did driver brace before crash? Describe:

R. FOOT ON BRAKE, L. FOOT ON FLOOR/TOE PADS  
 BOTH HANDS ON STEERING WHEEL RIM - 10 o'clock 2 o'clock position  
 SITTING IN A NORMAL, UPRIGHT SEATED POSITION.

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

NONE, DOESN'T SMOKES - DOESN'T WEAR GLASSES

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

WAS AWARE OF THE AIRBAG - NOTICED NO UNUSUAL NOISE OR SMOKE,

PASSENGER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown 2

Describe:

AIRBAG SUPPLEMENT

1

## ACCIDENT SUMMARY

1. Accident Date: [REDACTED] 93

2. Police Investigated

- (1) Yes
- (2) No
- (3) Unknown

Agency: MOP

City:

County: HARFORD, MD.

1

3. General Locality

2

- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields

4. Configuration (First Harm)

2

- (0) Struck Object or Ped
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Dir.
- (7) Noncollision
- (8) Nonimpact Deployment
- (9) Unknown

5. Fire Involved

4

- (0) None
- (1) Airbag Vehicle
- (2) Other Vehicle
- (3) Both Vehicles
- (9) Unknown

6. Vehicles Involved

2

7. Persons Involved

5

8. Injured Persons

5

9.

Fard

3

## AIRBAG

10. Late vehicle Inspected: [REDACTED] 93

11. Reason Vehicle Not Inspected

1

- (0) Not Required
- (1) Inspection Completed
- (2) Cannot be Located
- (3) Repaired or Destroyed
- (5) Refusal or Impounded
- (7) Other:

12. Impact Data Obtained

4

- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush, and Trajectory

13. Basis of Delta-V

1

- (0) Not Computed (Unknown why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage + Traj
- (3) OLDMISS
- (4) POLES
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope
- (8) Insufficient Data

## VEHICLE HISTORY

14. Prior Impacts for AB Vehicle?

2

- (1) Yes
- (2) No
- (9) Unknown

15. Prior AB Maintenance or Service

2

- (1) Yes, (2) No, (9) Unknown

Describe:

**AIRBAG SUPPLEMENT****2****AIRBAG VEHICLE**Fleet: **None**VIN: **1FACP5745NAxxxxxx**

Mileage:

**SYSTEM READINESS LAMP**

16. Pre-Impact Lamp Condition  
 (1) Functioning/Proved Out  
 (2) Inoperative  
 (9) Unknown

**1**

17. Driver's Report of Pre-Impact  
 Flashing  
 (00) No Flashing Reported  
 (01) Continuous Flashing  
 (02)

**ff**

Number of Flashes: \_\_\_\_\_  
 (11)  
 (12) Constant Light  
 (19) Flashing, Unknown Number  
 (88) Not Applicable, System Removed  
 (99) Unknown

18. Period of Pre-Impact Flashing  
 (0) No Flashing  
 (1) Same Day as Impact  
 (2) Prior Day  
 (3) Prior Two Days  
 (4) Prior Week  
 (5) Prior Month  
 (6) Over One Month  
 (9) Unknown

**ff**

19. Post-Impact Lamp Condition  
 (1) Functioning/Proved Out  
 (2) Inoperative  
 (9) Unknown

**2**

20. Post-Impact Flashing  
 (00) No Flashing Reported  
 (01) Continuous Flashing  
 (02)  
 Number of Flashes: \_\_\_\_\_  
 (11)  
 (12) Constant Light  
 (19) Flashing, Unknown Number  
 (88) Not Applicable, System Removed  
 (99) Unknown

**ff****Airbag Vehicle First Harmful Event****13**

(01) Fire or explosion  
 (02) Immersion  
 (03) Gas Inhalation  
 (04) Fell from vehicle  
 (05) Injured in vehicle  
 (06) Other noncollision (specify):  
 (07) Overturn  
 (08) Jackknife  
**COLLISION WITH:**  
 (09) Pedestrian  
 (10) Pedalcyclist  
 (11) Railway train  
 (12) Animal  
 (13) Motor vehicle in transport  
 (same roadway)  
 (14) Motor vehicle in transport  
 (other roadway)  
 (15) Parked motor vehicle  
 (16) Other type nonmotorist (specify):  
 (17) Thrown or falling object  
 (18) Boulder  
**COLLISION WITH FIXED OBJECT**  
 (20) Building  
 (21) Impact attenuator/crash cushion  
 (22) Bridge pier or abutment  
 (23) Bridge parapet end  
 (24) Bridge rail  
 (25) Guardrail  
 (26) Concrete traffic barrier  
 (27) Median barrier  
 (28) Other longitudinal barrier (specify):  
 (29) Highway/traffic sign post  
 (30) Overhead sign support  
 (31) Luminaire/light support  
 (32) Utility pole  
 (33) Other post, pole, or support  
 (34) Culvert  
 (35) Curb  
 (36) Ditch  
 (37) Embankment-earth  
 (38) Embankment-rock, stone, or concrete  
 (39) Fence  
 (40) Wall  
 (41) Fire hydrant  
 (42) Shrubbery  
 (43) Tree  
 (44) Other fixed object (specify):  
 (45) Pavement surface irregularity  
 (99) Unknown

**AIRBAG SUPPLEMENT**

3

**AIRBAG VEHICLE IMPACT SUMMARY**

22. Vehicle Role  
 (0) Noncollision  
 (1) Striking unit  
 (2) Struck unit  
 (3) Both striking and struck  
 (9) Unknown

 3

23. Manner of Leaving Scene  
 (1) Driven  
 (2) Towed-due to damage  
 (3) Towed-not for damage  
 (4) Towed-details unknown  
 (5) Abandoned  
 (9) Unknown

 2

24. Number of Impact Events  
 (8) 8 or more  
 (9) Unknown

 1

25. Rollover  
 (0) No rollover  
 (1) First event  
 (2) Subsequent event  
 (3) Yes, Unknown event  
 (9) Unknown

 0

26. Override/Underride  
 (0) No override/underride  
 (1) Override - 1st CDC  
 (2) Override - Other CDC  
 (3) Underride - 1st CDC  
 (4) Underride - Other CDC  
 (9) Unknown

 0**AIRBAG VEHICLE DAMAGE**  
CODES: (1) Yes, (2) No, (9) Unknown

27. Left Front Fender Damage

 2

28. Right Front Fender Damage

 1

29. Center Top of Grille Damage

 1**FRONT BUMPER E.A. STATUS**

30. Left  
 (1) Normal  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

 2

31. Right

 4

(1) Normal  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

**FIRST AIRBAG VEHICLE IMPACT:**

32. Configuration

 2

(0) Struck Object or Ped  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe-Same Direction  
 (6) Sideswipe-Opposite Dir.  
 (7) Noncollision  
 (8) Nonimpact Deployment  
 (9) Unknown

33. CDC: *01 F2EW2*

34. Object Contacted: *1993 Plymouth Acclaim*

**PRIMARY/DEPLOYMENT IMPACT:**

35. Event Number

 1

36. Total Delta-V (KPH)

 35

37. Longitudinal Delta-V (KPH)

 -34

38. Configuration

See 32 above for codes

 2

39. CDC: *01 F2EW2*

40. Object Contacted: *1993 Plymouth Acclaim*

**AIRBAG SUPPLEMENT****AIRBAG SYSTEM DAMAGE**

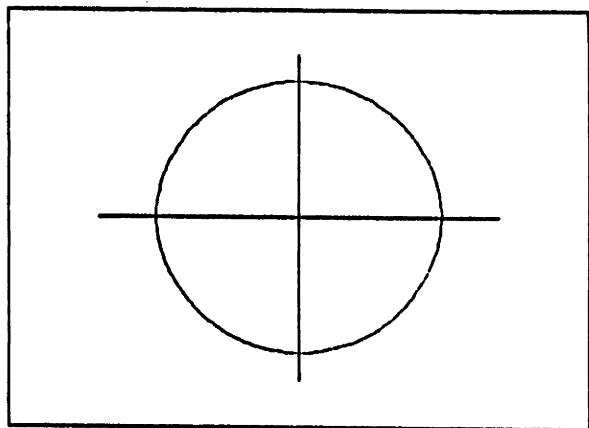
CODES: (1) Yes, Damaged  
 (2) No, Intact  
 (3) Not Applicable  
 (9) Unknown

41. Airbag Module	<input type="checkbox"/> 2
42. Left Front Sensor	<input type="checkbox"/> 2
43. Center Front Sensor	<input type="checkbox"/> 2
44. Right Front Sensor	<input type="checkbox"/> 2
45. Rear Cowl Sensor	<input type="checkbox"/> 2
46. Diagnostic Module	<input type="checkbox"/> 2
47. Wiring	<input type="checkbox"/> 2
48. Knee Diverter	<input type="checkbox"/> 3
49. Indication of disconnected or loose electrical connectors	<input type="checkbox"/> 2
50. Condition of Deployed Bag	<input type="checkbox"/> 1
	(1) Bag intact (2) Split or torn (3) Cut by object in impact (4) Cut after accident (5) Other (8) NA (not deployed) (9) Unknown

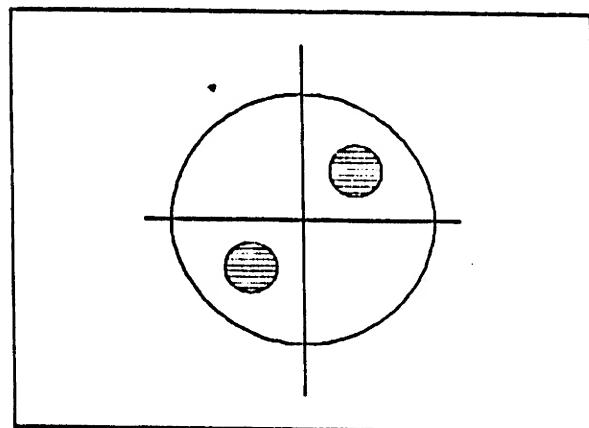
**DESCRIBE SYSTEM AND BAG DAMAGE:***No Damage*

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

FRONT



BACK



**AIRBAG SUPPLEMENT**

5

**OCCUPANTS OF AIRBAG CAR**

51. Number of Occupants in Vehicle

 1

52. Number of Injured Persons

 1

53. Maximum AIS in Airbag Vehicle

- (0) No Injury
- (1-6) AIS Severity
- (7) Injured, unknown severity
- (9) Unknown

 2**DRIVER**

Age: 39

Sex: male

54. Number of Driver Injuries

 2

55. Source of Best Injury Data

- (0) Not injured
- (1) Autopsy
- (2) Hospital Medical Records
- (3) Emergency Room only
- (4) Private physician, clinic
- (5) Lay Coroner Report
- (6) EMS Personnel
- (7) Interviewee
- (8) Police
- (9) Unknown

 7**MAXIMUM AIS BY BODY REGION**

REGION	MAX AIS	CONTACT
Head/Neck/Face	_____	_____
Chest	_____	_____
Abdomen	1	41
Legs/Hips	_____	_____
Other (Arms)	2	41
Driver Maximum	2	41

**EJECTION**

Extent: N/A

Portal: N/A

**OTHER VEHICLE:**

Maximum AIS

3Prime/Deploy Impact w AB Vehicle  
Event Number1

CDC: 12 F4EW3

38

Total Delta V (KPH)

Make: Plymouth

Model Year: 1993

Model: Acclaim

Body Type: 4 Door

**NOTES:**

AIRBAG SUPPLEMENT

6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown 1

Evidence: LOAD MARKS AND PUCKERING

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did driver brace before crash? Describe:

R. FOOT ON ACCELERATOR L. FOOT ON FLOOR/TOE PAN

BOTH HANDS ON STEERING WHEEL RIM - APPROX. AT 10 o'clock 2 o'clock Positions  
SITTING IN A NORMAL, UPRIGHT SEATED POSITION.DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

WAS WEARING GLASSES - THEY WERE NOT BROKEN, NOR DID THEY LEAVE HIS FACE  
NO OTHER FOREIGN OBJECTSDRIVER COMMENTS: Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

NOTICED NO UNUSUAL NOISE, ODOR, OR SMOKE. THE DRIVER WAS AWARE OF THE AIR BAG AND WAS DELIGHTED WITH IT'S OPERATION. HE FEELS HE WOULD HAVE SUSTAINED GREATER INJURY WITHOUT IT.

PASSENGER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown 2

Describe:



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# CRASHPC PROGRAM SUMMARY

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

## Identifying Title

Primary Sampling Unit

DSI-93-AB-006  
Case No.-Stratum

0 1  
Accident Event Sequence No.

9 3  
Date (Month, day, year) of Run

## CRASHPC Vehicle Identification

Vehicle 1

1993

PLYMOUTH

ACCLAIM

01

Vehicle 2

1992

FORD

TAURUS

02

Year

Make

Model

NASS

Veh. No.

## GENERAL INFORMATION

### VEHICLE 1

### VEHICLE 2

Size

3

3

Weight

1263 + 277 + 0 = 1540 kg  
Curb Occupant(s) Cargo

Size

1494 + 88 + 68 = 1642 kg  
Curb Occupant(s) Cargo

CDC

12 F Y E W 3

Size

01 F Z E W 2

PDOF (-180 to +180)

0 0 0 3 °

PDOF (-180 to +180)

Stiffness

9

3

Stiffness

## SCENE INFORMATION

Rest and Impact Positions  No  Go To Damage Information  Yes

### VEHICLE 1

### VEHICLE 2

Rest Position

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

Rest Position

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

Impact Position

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

Impact Position

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

Slip Angle (-180 to +180)

\_\_\_\_\_ °

Slip Angle (-180 to +180)

\_\_\_\_\_ °

## VEHICLE MOTION

Sustained Contact  No  Yes

### VEHICLE 1

### VEHICLE 2

Skidding (Rotation)

No  Yes

No  Yes

Skidding Stop Before Rest  No  Yes

Skidding Stop Before Rest  No  Yes

End of Rotation Position

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

X \_\_\_\_\_ . \_\_\_\_ m  
Y \_\_\_\_\_ . \_\_\_\_ m  
PSI \_\_\_\_\_ °

Curved Path

No  Yes

No  Yes

Point on Path

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Point on Path

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Rotation Direction  None  CW  CCW

Rotation Direction  None  CW  CCW

Rotation > 360°  No  Yes

Rotation > 360°  No  Yes

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

**FRICITION INFORMATION**

**TRAJECTORY INFORMATION**

Coefficient of Friction . \_\_\_\_\_

Trajectory Data:  No  Yes

Rolling Resistance Option \_\_\_\_\_

If No, Go To Damage Information

**Vehicle 1 Rolling Resistance**

LF \_\_\_\_\_ RF \_\_\_\_\_

Vehicle 1 Steer Angles

LR \_\_\_\_\_ RR \_\_\_\_\_

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

**Vehicle 2 Rolling Resistance**

LF \_\_\_\_\_ RF \_\_\_\_\_

Vehicle 2 Steer Angles

LR \_\_\_\_\_ RR \_\_\_\_\_

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary:  No  Yes

**First Point**

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

**Second Point**

X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Secondary Coefficient of Friction . \_\_\_\_\_

**DAMAGE INFORMATION**

**VEHICLE 1**

**VEHICLE 2**

Damage Length L 1 5 2 cm

Damage Length L 1 5 8 cm

**Crush Depths**

C<sub>1</sub> Ø 6 1 cm

C<sub>1</sub> Ø 6 6 cm

C<sub>2</sub> Ø 7 7 cm

C<sub>2</sub> Ø 6 6 cm

C<sub>3</sub> Ø 5 1 cm

C<sub>3</sub> Ø 2 9 cm

C<sub>4</sub> Ø 3 6 cm

C<sub>4</sub> Ø 5 5 cm

C<sub>5</sub> Ø 2 4 cm

C<sub>5</sub> Ø 3 6 cm

C<sub>6</sub> Ø 2 1 cm

C<sub>6</sub> Ø 2 7 cm

**Damage Offset**

D Ø 0 3 8 cm

Damage Offset

D Ø 0 3 9 cm

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information  
for this vehicle should be recorded above.

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

## SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

## CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)	TOTAL(KPH)	LONG.(KPH)	LAT.(KPH)	ANG.(DEG)
VEH #1	37.6	-37.5	2.0	-3.0
VEH #2	35.2	-34.0	-9.1	15.0

ENERGY DISSIPATED BY DAMAGE VEH#1:107231.8 JOULES VEH#2: 63663.9 JOULES

SUMMARY OF DAMAGE DATA  
VEHICLE # 1

(\* INDICATES DEFAULT VALUE)

## VEHICLE # 2

TYPE-----	CATEGORY 3	TYPE-----	CATEGORY 3
STIFFNESS---	CATEGORY 9	STIFFNESS---	CATEGORY 3
WEIGHT-----	1540.0 KGS	WEIGHT-----	1642.0 KGS
CDC-----	12PYEW3	CDC-----	01PZEW2
L-----	152.4 CM.	L-----	157.5 CM.
C1-----	60.7 CM.	C1-----	5.6 CM.
C2-----	77.0 CM.	C2-----	5.6 CM.
C3-----	51.3 CM.	C3-----	29.2 CM.
C4-----	36.1 CM.	C4-----	54.9 CM.
C5-----	24.4 CM.	C5-----	29.5 CM.
C6-----	20.6 CM.	C6-----	27.2 CM.
D-----	-38.1 CM.	D-----	39.4 CM.
RHO-----	1.00 *	RHO-----	1.00 *
ANG-----	-3.0 DEG.	ANG-----	15.0 DEG.
D'-----	-55.4 CM.	D'-----	56.1 CM.

## DIMENSIONS AND INERTIAL PROPERTIES

A1 = 130.3 CM.	A2 = 130.3 CM.
B1 = 141.0 CM.	B2 = 141.0 CM.
TR1 = 149.6 CM.	TR2 = 149.6 CM.
I1 = 331504.9 NEWT-SEC**2-CM	I2 = 353475.1 NEWT-SEC**2-CM
M1 = 15.458 NEWT-SEC**2/CM	M2 = 16.483 NEWT-SEC**2/CM
XP1 = 228.1 CM.	XP2 = 228.1 CM.
XR1 = -270.3 CM.	XR2 = -270.3 CM.
YS1 = 92.2 CM.	YS2 = 92.2 CM.

## SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

## CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL(MPH)	LONG.(MPH)	LAT.(MPH)	ANG.(DEG)
	VEH #2	21.9	-23.3	1.2	-3.0
			-21.1	-5.7	15.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 79079.5 FT-LB VEH#2: 48949.8 FT-LB

SUMMARY OF DAMAGE DATA  
VEHICLE # 1

(\* INDICATES DEFAULT VALUE)

TYPE-----CATEGORY 3  
 STIFFNESS---CATEGORY 9  
 WEIGHT----- 3395.0 LBS.  
 CDC-----12FYEW3  
 L----- 60.0 IN.  
 C1----- 23.9 IN.  
 C2----- 30.3 IN.  
 C3----- 20.2 IN.  
 C4----- 14.2 IN.  
 C6----- 9.8 IN.  
 C8----- 8.1 IN.  
 D----- -15.0  
 RHO----- 1.00 \*  
 ANG----- -3.0 DEG.  
 D'----- -21.8 IN.

TYPE-----CATEGORY 3  
 STIFFNESS---CATEGORY 3  
 WEIGHT----- 3820.0 LBS.  
 CDC-----01FZEV2  
 L----- 62.0 IN.  
 C1----- 2.2 IN.  
 C2----- 2.2 IN.  
 C3----- 11.5 IN.  
 C4----- 21.6 IN.  
 C5----- 11.6 IN.  
 C6----- 10.7 IN.  
 D----- 15.5  
 RHO----- 1.00 \*  
 ANG----- 15.0 DEG.  
 D'----- 22.1 IN.

## DIMENSIONS AND INERTIAL PROPERTIES

A1	=	51.3	IN.	A2	=	51.3	IN.
B1	=	55.5	IN.	B2	=	55.5	IN.
TR1	=	58.9	IN.	TR2	=	64.9	IN.
I1	=	29342.1	LB-SEC**2/IN	I2	=	31280.7	LB-SEC**2/IN
M1	=	8.827	LB-SEC**2/IN	M2	=	9.412	LB-SEC**2/IN
XF1	=	89.8	IN.	XF2	=	89.8	IN.
XR1	=	-106.4	IN.	XR2	=	-106.4	IN.
YS1	=	36.3	IN.	YS2	=	36.3	IN.